

# COUNCIL ASSESSMENT REPORT

Panel Reference	PPSSTH-69
DA Number	DA20/0558
LGA	Wagga Wagga
Proposed Development	Electricity Generating Works (Solar Farm)
Street Address	190 Rodhams Rd, Uranquinty, NSW 2652
Applicant/Owner	Applicant: Thomas Parel, BayWe r.e. Projects Australia Pty Ltd Owner: Myree McGrath
Date of DA lodgement	15 October 2020
Total number of Submissions Number of Unique Objections	<ul style="list-style-type: none"> <li>27 Submissions (all unique)</li> </ul>
Recommendation	Approval
Regional Development Criteria (Schedule 7 of the SEPP (State and Regional Development) 2011	<p>Private infrastructure and community facilities over \$5 million</p> <p>Development that has a capital investment value of more than \$5 million for any of the following purposes—</p> <p>(a)...electricity generating works...</p>
List of all relevant s4.15(1)(a) matters	<ul style="list-style-type: none"> <li>Wagga Wagga Local Environmental Plan 2010</li> <li>State Environmental Planning Policy (Infrastructure) 2007</li> <li>State Environmental Planning Policy No 55 – Remediation of Land</li> <li>State Environmental Planning Policy (Koala Habitat Protection) 2021</li> <li>State Environmental Planning Policy (State and Regional Development) 2011</li> <li>Wagga Wagga Development Control Plan 2010</li> <li>Clause 92A of the Environmental Planning and Assessment Regulation 2000 - Additional matters that consent authority must consider for Wagga Wagga</li> </ul>
List all documents submitted with this report for the Panel's consideration	<ul style="list-style-type: none"> <li>Site plans, indicative tracker plans, building plans.</li> <li>Statement of Environmental Effects.</li> <li>Aboriginal Cultural Heritage Assessment.</li> <li>Biodiversity Assessment.</li> <li>Bushfire Assessment Report.</li> <li>Noise Assessment Calculations.</li> <li>Traffic Impact Assessment.</li> <li>Hydrology Assessment Report.</li> <li>Preliminary Runoff Assessment.</li> <li>Glint and Glare Studies (x3)</li> <li>Glint and Glare Peer Review.</li> </ul>
Clause 4.6 requests	Not Applicable
Summary of key submissions	<ul style="list-style-type: none"> <li>Construction Traffic Impacts</li> <li>Visual impacts</li> <li>Glint and Glare Impacts</li> <li>Impacts on Agricultural Land</li> <li>Fire risk</li> <li>Suitability of site</li> <li>Waste, contamination</li> </ul>
Report prepared by	Steven Cook
Report date	30 November 2021

## Summary of s4.15 matters

Have all recommendations in relation to relevant s4.15 matters been summarised in the Executive Summary of the assessment report?

Yes

**Legislative clauses requiring consent authority satisfaction**

Have relevant clauses in all applicable environmental planning instruments where the consent authority must be satisfied about a particular matter been listed, and relevant recommendations summarized, in the Executive Summary of the assessment report?

Yes

*e.g. Clause 7 of SEPP 55 - Remediation of Land, Clause 4.6(4) of the relevant LEP*

**Clause 4.6 Exceptions to development standards**

If a written request for a contravention to a development standard (clause 4.6 of the LEP) has been received, has it been attached to the assessment report?

Not applicable

**Special Infrastructure Contributions**

Does the DA require Special Infrastructure Contributions conditions (S7.24)?

*Note: Certain DAs in the Western Sydney Growth Areas Special Contributions Area may require specific Special Infrastructure Contributions (SIC) conditions*

No

**Conditions**

Have draft conditions been provided to the applicant for comment?

*Note: in order to reduce delays in determinations, the Panel prefer that draft conditions, notwithstanding Council's recommendation, be provided to the applicant to enable any comments to be considered as part of the assessment report*

No

**Executive Summary**

1. The applicant seeks consent for a 42ha, 40,000 solar panel solar farm with a capacity of 17 MWp DC / 12MW AC. Four containerised power stations are proposed in conjunction with the development.
2. Access to the site, both during construction and during operation is proposed off Churches Plain Rd. Construction is proposed to take approximately 9 months and at its peak will result in a daily average of 40 light vehicle movements and 6 heavy vehicle movement through Uranquinty.
3. The site is part of a larger rural property currently used for broadacre farming such as cropping and grazing. The site is located in proximity to the village of Uranquinty, other rural holdings, the Australian Army Recruit Training Centre at Kapooka, the Main Southern Railway and the Olympic Highway.
4. The site is relatively flat and is surrounded on several sides by higher slopes.
5. The development is Integrated Development, requiring an Aboriginal Heritage Impact Permit under the *National Parks and Wildlife Act 1974*. Heritage NSW have provided General Terms of Approval.
6. The site is zoned RU1 Primary Production under the Wagga Wagga Local Environmental Plan 2010 and is permitted with consent. The development has been assessed as being consistent with all relevant provisions of the WWLEP 2010.
7. Parts of the property is identified as being flood prone, however this does not impact the development site.
8. Parts of the property is mapped as being bushfire prone, and the whole site has been assessed as potentially being bushfire prone. The development has been considered against Planning for Bushfire Protection 2019, including the provisions relating directly to solar farms, and is considered acceptable.
9. The application has been assessed against all relevant SEPPs, including:
  - a. State Environmental Planning Policy (Infrastructure) 2007

- b. State Environmental Planning Policy No 55 – Remediation of Land
- c. State Environmental Planning Policy (Koala Habitat Protection) 2021
- d. State Environmental Planning Policy (State and Regional Development) 2011

The development is considered consistent with all relevant provisions of these SEPPs.

10. Referrals to the rail authority ARTC, Essential Energy, Transgrid, and Transport for NSW were carried out under the Infrastructure SEPP. Essential Energy and TfNSW provided no objection. ARTC and Transgrid did not respond.
11. The site was assessed under SEPP 55 and the site was considered suitable for the proposed development.
12. The development was assessed against the provisions of the Wagga Wagga Development Control Plan 2010 and considered generally consistent.
13. Potential impacts, including visual impacts, glint and glare impacts, impacts on productive agricultural land and impacts from traffic, noise and vibration, dust, flora and fauna and construction have all been assessed and are considered manageable.
14. In relation to visual impacts, impacts are considered acceptable in the context of the landscape, due to distances from receivers, and due to the presence of existing and proposed vegetative screening.
15. In relation to glint and glare impacts, assessments were carried out and peer reviewed. The assessments demonstrate that impacts are largely avoided once buffer plantings are established. During the establishment phase, glint and glare impacts can be substantially eliminated by adjusting the resting angle of the panels from 0 degrees to 5 degrees.
16. Traffic impacts are not considered to be significant, with peak traffic movements averaging 40 light vehicle and 6 heavy vehicle movements a day. Conditions of consent have been recommended to ensure that the local road network is protected and maintained to its current standard.
17. 27 public submissions were received, all by way of objection. 11 of these submissions were identified as being residents adjoining the site or in the local Urquinty area. Submissions raised a range of issues, including impacts on productive agricultural land, visual impacts, glint and glare impacts, construction traffic impacts, fire risk, suitability of site, waste and contamination, ownership and supply chains. All submissions have been considered in full and are considered adequately addressed.
18. Submissions were also received from public authorities, being Essential Energy, Transport for NSW, Heritage NSW, Natural Resource Access Regulator and Local Land Services.
19. The site of the proposed development has been assessed as being suitable and the development is considered to be strongly in the public interest.
20. The development is recommended for approval, subject to conditions as detailed in the report.



# Report of Development Application

## Pursuant to Section 4.15 of the Environmental Planning and Assessment Act 1979

### APPLICATION DETAILS

Application No.:	DA20/0558
Modification No.:	N/A
Council File No.:	D/2020/0558
Date of Lodgement:	15/10/2020
Applicant:	Thomas Parel Baywa R.E. Projects Australia Pty Ltd 79-81 Coppin Street RICHMOND VIC 3121
Proposal:	Electricity Generating Works (Solar Farm)
Description of Modification:	N/A
Development Cost:	\$18,955,000
Assessment Officer:	Steven Cook
Determination Body:	Officer Delegation 7.39
Other Approvals	Aboriginal heritage impact permit - s90 of the National Parks and Wildlife Act 1974
Type of Application:	Development Application
Concurrence Required:	No
Referrals:	Internal
Adjoining Owners Notification:	5/11/21-19/11/21
Advertising:	5/11/21-19/11/21
Owner's Consent Provided:	8/10/2020
Location:	Bound by Rodhams Rd to the north, and the parallel running Main Southern Railway and Olympic Highway to the south (meeting at the eastern end of the site at the triangle point). The western edge of the property is Sandy Creek and the village of Uranquinty.

### SITE DETAILS

Subject Land:	Fruitdale 190 Rodhams Rd URANQUINTY NSW 2652 Lot 118 DP 754567, Lot 129 DP 754567, Lot 149 DP 754567, Part Lot 55 DP 754567
Owner:	M McGrath



## REPORT

### DESCRIPTION OF DEVELOPMENT

The proposed development is for an electricity generating works (solar farm). The key features of the proposal are described in the Statement of Environmental Effects as follows:

Proposal element	Description
<b>Proposal</b>	Sandy Creek Solar Farm.
<b>Capacity</b>	17 MWp DC / 12 MW AC Note: the capacity is based on products and technology available at the time of the proposal but may change through the life of the solar farm as advances in technology occur.
<b>Development site</b>	Approximately 42 hectares solar farm infrastructure area.
<b>Solar array</b>	Approximately 40,000 solar panels mounted in rows on tracker tables and approximately 5,000 array posts. Four containerised power stations (containing SMA SC-4400-UP Medium Voltage Power Stations or similar) within the solar array.
<b>Grid connection infrastructure</b>	Connection to an existing 22 kV powerline along the Olympic Highway via a proposed switching station on the eastern side of the development site. Grid connection assets, to be gifted to Essential Energy, would be subject to a Part 5 assessment and would be undertaken with the approval of the electricity authority, do not form part of this DA. All other assets that require approval as part of this DA have been identified in this SEE and the development plans provided at Appendix A.
<b>Site compound</b>	Approximately 800sqm containing control facilities, storage, temporary site office and amenities.
<b>Access tracks</b>	Internal access tracks constructed of engineered fill topped with crushed stone pavement would be used to access the solar farm infrastructure for maintenance, as per the accompanying concept site plan.
<b>Perimeter fencing, lighting, and CCTV</b>	Standard wire mesh fencing installed around the site perimeter would be approximately 2m high. Infra-red security technology and CCTV cameras may be installed on posts around the perimeter fence and on the main access track.
<b>Construction hours</b>	Standard daytime construction hours would be 7.00am to 6.00pm Monday to Friday and 8.00 am to 1.00 pm on Saturdays. Construction would not occur on Sundays.
<b>Construction timing</b>	Approximately 9 months.
<b>Workforce</b>	Construction – approximately 40 workers at peak construction. Operation – 1 operation/maintenance contractor, stationed off-site.
<b>Operation period</b>	Up to 50 years.
<b>Decommissioning</b>	The site would be returned to its pre-works state. All above ground infrastructure would be removed to a depth of 1000mm (exceptions apply, see Section 2.6). The site would be rehabilitated in consultation with the landowner, consistent with future land use requirements.
<b>Capital investment value</b>	Calculated at approximately \$19 million. A quantity surveyor's report has been provided for Council's reference.

*Figure 1 - SEE Summary of Development*

The solar panels are proposed to be erected in a portrait orientation on single axis north-south tracker tables. Panels may be stacked one or two panels high, with design to be finalised, however, assessment has been carried out on the more significant two panel arrangement. Height of the panels and trackers would be 2.5m where one panel is erected or 4m where there are two. Rows of panels are proposed between 5m and 16m apart.

Landshaping is not proposed with the trackers to be erected on steel posts, with footings between 1-3m deep

The four containerised power stations, each containing an inverter, a transformer, and a switchgear are proposed to be 6.5m long, 2.5m wide and 3m high. A 2m high wire mesh fence is proposed to surround the site, with a 200mm gap at the base to allow wildlife to pass.

Access to the site is proposed via Churches Plain Rd, during both operation and construction. The proposed access route is via the Olympic Hwy, and then Yarragundry St and Baker St, through the village, to Churches Plain Rd. Construction is anticipated to take 9 months, and will include a range of temporary facilities including a laydown area, parking and site offices. A maximum peak of 40 workers is predicted. During construction waste is to be collected and disposed of at a licenced landfill, with the SEE noting approximately 80% of site waste is likely to be recyclable.

The SEE identifies average daily heavy vehicle movements during construction will peak at 6 movements a day, whilst light vehicle movements will peak at 40 movements a day.

A 5m wide buffer screen is proposed on the boundary of parts of the site outside the security fencing. The site layout is illustrated in the figure below.

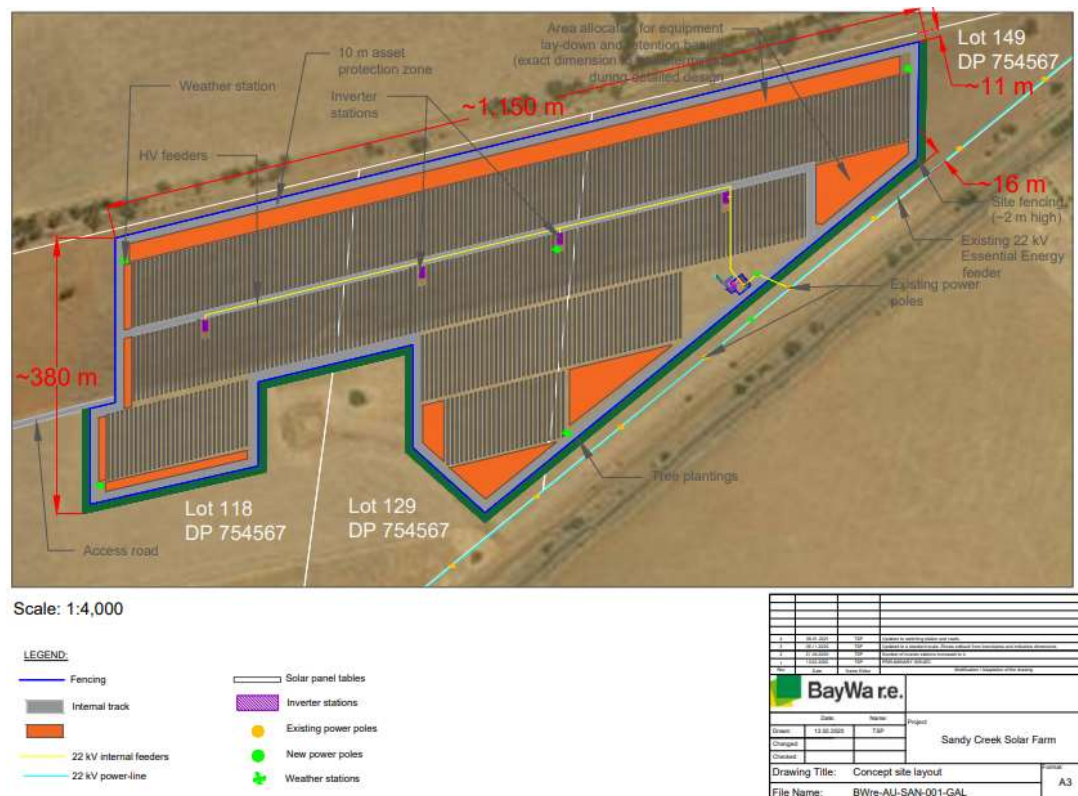


Figure 2 - Site Layout Plan

Decommissioning of the site at the end of the life of the development is proposed, with all above ground infrastructure to be removed, and cabling removed to a depth of 1m. The proposal includes the submission of a decommissioning plan prior to operation of the solar farm.

The proposed development is classified as Integrated Development and requires an Aboriginal Heritage Impact Permit under s90 of the *National Parks and Wildlife Act 1974*. The works proposed may impact on 13 Aboriginal archaeological sites that lie within the development site and therefore require an AHIP.

### **THE SITE & LOCALITY**

The development is proposed on Lots 118, 129 and 149 DP 754567, with access over Lot 55 DP 754567. All lots form part of the property known as 'Fruitdale' at 190 Rodhams Rd, Uranquinty. The property is an irregular triangular shape, bound by Rodhams Rd to the north, and the parallel running Main Southern Railway and Olympic Highway to the south (meeting at the eastern end of the site at the triangle point). The western edge of the property is Sandy Creek and the village of Uranquinty. The subject property is indicated in the figure below (with blue highlight), with the lots subject to the application highlighted with a green overlay.

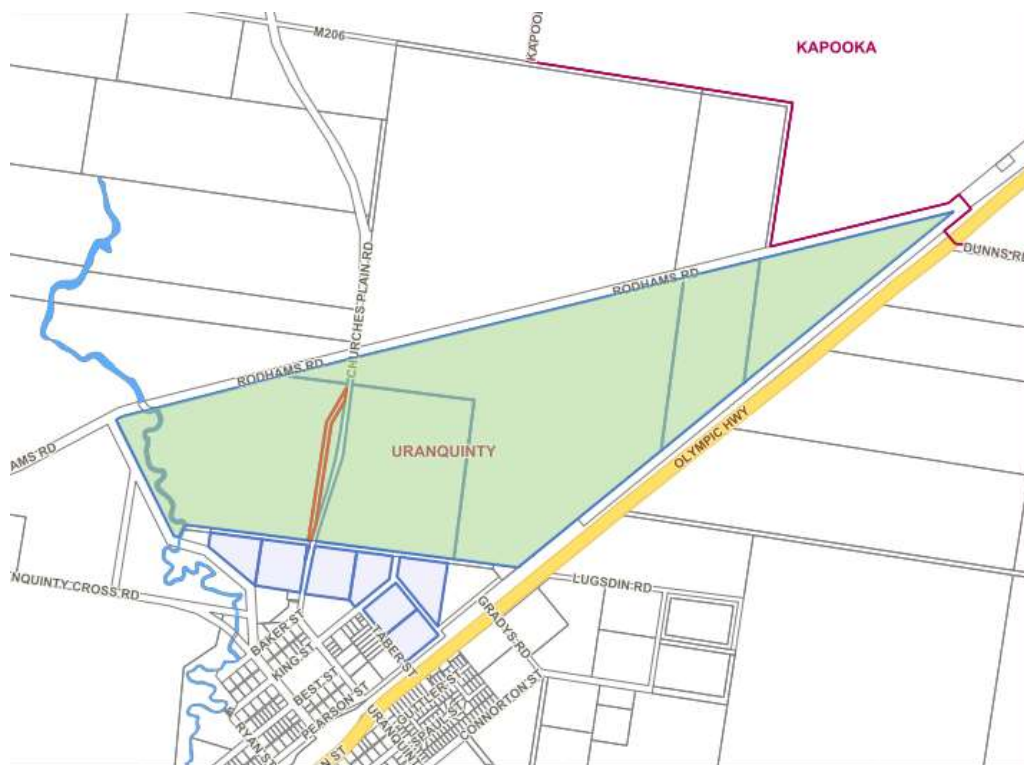


Figure 3 - Subject Land

The site is relatively flat falling approximately 40m east to west over 3.5km, with Sandy Creek at the western boundary of the property. The majority of the property and the subject lots are cleared and are used for extensive agricultural purposes. Significant patches of vegetation only occur near the creekline, and a clump approximately 8ha in size in the centre of the property.

The site is bisected by Churches Plain Rd, with a dwelling standing on the western side of this line. The solar farm is restricted to land on the eastern side of Churches Plain Rd.



Land to the north of the site, on the opposite side of Rodhams Rd, and southeast, on the opposite side of the Olympic Hwy is predominantly used for agricultural purposes. Land generally rises on both of these aspects above the subject site.

West of the site, on the opposite bank of Sandy Creek is further agricultural land, whilst to the southwest is the village of Uranquinty. Uses in the village bordering the property include dwellings, a public oval and primary school. The village is located over 1km from the solar farm proper.

Bordering the northern tip of the site, on the opposite side of Rodhams Rd, is the Australian Army Recruit Training Centre at Kapooka.

As noted, the Main Southern Railway Line runs adjacent to the site, between the Olympic Hwy and the property. Other uses in the vicinity of the site are a small number of large lot residential properties south of the highway, a cemetery, a rural waste transfer station, and a model aeroplane club.

#### **MATTERS FOR CONSIDERATION PURSUANT TO SECTION 4.15(1)**

*For the purpose of determining this development application, the following matters that are of relevance to the development have been taken into consideration pursuant to the provisions of Section 4.15(1) of the Environmental Planning and Assessment Act, 1979.*

##### **(a)(i) - The provisions of any environmental planning instrument (EPI)**

###### **Local Environmental Plan**

###### Wagga Wagga Local Environmental Plan 2010

Under the provisions of the Wagga Wagga Local Environmental Plan, the land on which the development is proposed, including access, is zoned as RU1 Primary Production. The development is considered to be most appropriately characterised as an 'electricity generating works'. Electricity generating works are permissible with consent in the RU1 zone as an innominate land use.

The objectives of the RU1 are:

- *To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.*

The site of the development is mapped as being Class 3 land on the Land and Soil Capability Mapping for NSW. According to Office of Environment and Heritage's 'The land and soil capability assessment scheme: second approximation', Class 3 land has limitations that must be managed to prevent soil and land degradation, however these can be readily overcome by widely available and readily implemented land management practices. Class 3 land is especially widespread on the NSW slopes and is capable of sustaining cultivation on a rotational basis, however productivity will vary with soil fertility and there are greater restrictions on use than for Class 1 or 2 lands due to increased limitations.

The site is currently being used for cropping and grazing and whilst the development will not encourage sustainable primary industry production on the site, the development will not impact significantly on the natural resource base or the existing agricultural potential of the site. There is scope for grazing to continue on the land and across parts of the subject site that are not developed for the solar farm. Upon decommissioning of the development, agricultural activities will be able to continue, with pre-development potential retained.

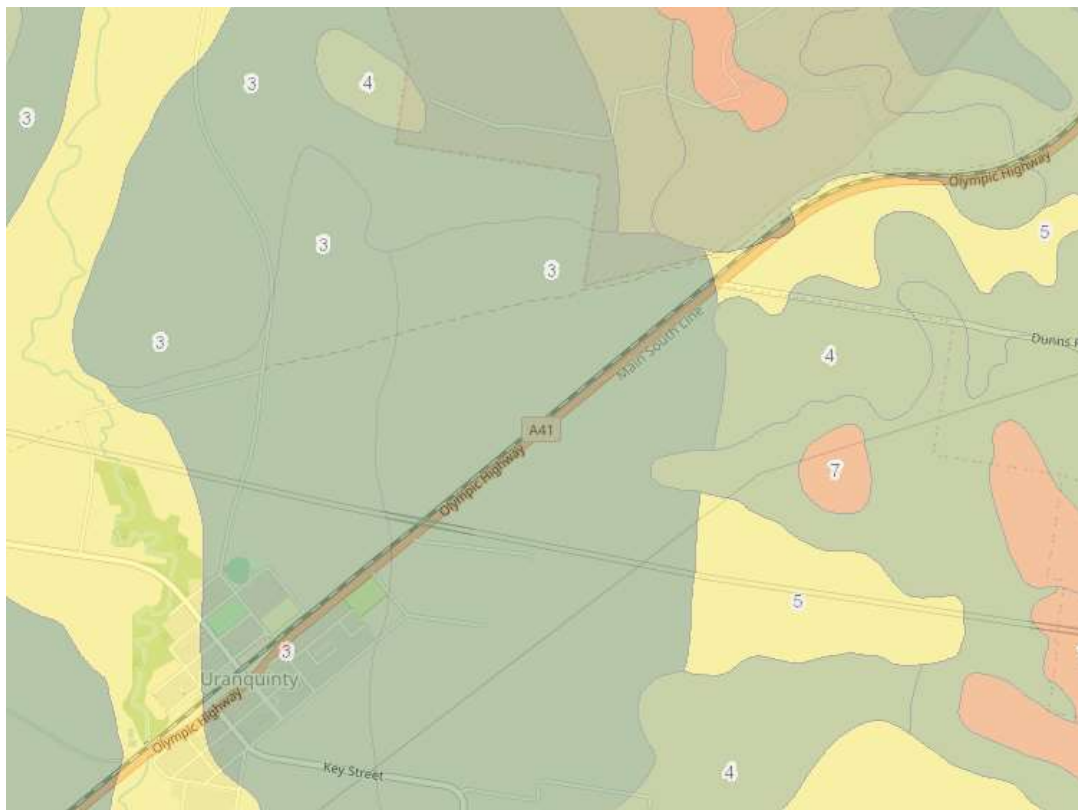


Figure 4 - Land and Soil Capability Mapping for NSW - SEED Map

- *To encourage diversity in primary industry enterprises and systems appropriate for the area.*

The proposed development is for a non-rural use which will not encourage diversity of primary industry enterprises or systems for the locality. However the use of the land for a solar farm is diversification into an alternative land use that is considered suitable within the rural zone.

- *To minimise the fragmentation and alienation of resource lands.*

The proposed development does not result in the fragmentation of land but will minimise the ability for the land to be used for agriculture. It is noted that the land is not proposed to be further subdivided, with the bulk of the property to remain in agricultural production. It is the intention to return the land to agricultural use following decommissioning in 50 years.

- *To minimise conflict between land uses within this zone and land uses within adjoining zones.*

The proposed development has the potential to conflict with other land uses in terms of visual and environmental impacts. The potential impacts of the development and proposed mitigation methods are discussed in further detail throughout this report. The development is considered to be appropriately located on lower slopes, in an area where a mixture of non-agricultural uses already exist, including other electricity generating works, infrastructure (including railways), and a military base.

- *To foster strong, sustainable rural community lifestyles.*

The proposed development does not result in the loss of any rural properties and much of the subject land will remain in agricultural production. As such, it is considered the size of the rural population, and the community it supports will remain unchanged following this development.

Rural zones are not exclusively agricultural zones, with a range of other uses permitted, included rural industries, quarries, and major recreation facilities which can all be reasonably expected to occur in these areas. It is the range of uses that exist in a community that give the community strength and sustainability and fosters rural lifestyles. Changes in the landscape and land use alone are not considered contrary to the existing lifestyle of the community, especially where these changes are reasonably mitigated.

The generation of renewable energy is essential to prevent serious irreversible climate change and ensure the sustainability of the lifestyle of all rural communities in Australia. Impacts resulting from changes in landscape character, or during construction, must be countered against the sustainability of not supporting renewable energy development. Given the area of land needed to house solar farms, rural areas naturally will need to accommodate these uses.

- *To maintain the rural landscape character of the land.*

The existing 'rural' landscape character of the land is already moderately impacted, being adjacent to a major railway line and highway, as well as other uses such as a model aeroplane club. Furthermore, the site is located in close proximity of a major urban centre, and an outlying satellite village. Undoubtedly though the proposed development will further alter this character. Landscaping will help mitigate these impacts, and other parts of the site will continue to be used for agricultural purposes. Following decommissioning of the development, it is proposed to return the land to agricultural purposes.

Notwithstanding the above, it is considered that solar farms are becoming part of the landscape character of rural areas as Australia transitions from a fossil fuel economy. The perception of what constitutes a "natural" rural environment is often based on a lived experience over a relatively short period of time. Since European settlement rural areas have been consistently altered, changed and developed, from vegetation removal, to the installation of infrastructure, such as dwellings, sheds, power lines, roads and railways. The rural landscape present in much of Australia, including the subject site, is by no means pristine, but is rather the outcome of constant development. Solar farms are arguably the most recent phase in this modification of the landscape and will increasingly become the norm in non-urban areas. Whilst not a natural element, like much of what is found in rural area, and some people do find them visually obtrusive, others find solar farms a generally inoffensive element in the landscape.

- *To allow tourist and visitor accommodation only where it is in association with agricultural activities.*

The development does not propose any tourist and visitor accommodation.

The RU1 zone objectives provide for agricultural and other land uses to co-exist. The zone purpose and provisions support the continuation and growth of farming but also provide the opportunity for non-farming uses to be considered in appropriate locations. A wider range of uses may be considered in this zone due to the availability of larger land parcels and its locality further away from more sensitive receivers including densely populated areas. Other non-rural

uses that are identified as being consistent and permitted within the RU1 zone include extractive industries and major outdoor recreation facilities.

The project lifespan for the facility is approximately 50 years after which the facility may be upgraded with new technology or will be decommissioned and the land made available for another land use consistent with the rural zoning of the land.

The installation of the solar farm would not inhibit the future potential of the land to be developed for rural purposes in accordance with the zone objectives. The LEP does not prohibit this type of development and the investment into the alternative energy supplies is consistent with the NSW Government Net Zero Plan: Stage 1 2020-2030 and the Riverina Murray Regional Plan. The Regional Plan lists renewable energy as a priority growth sector and has a listed direction within the plan to “promote the diversification of energy supplies through renewable energy generation.”

Rural landscapes will continue to change and evolve, as they have consistently done, to support Australia’s transition to renewable technologies and to meet the Federal Government’s commitment to net zero emissions by 2050.

Clause 5.10 ‘heritage conservation’ sets out that:

(2) *Development consent is required for...*

(a) *demolishing or moving...*

...  
(ii) *an Aboriginal object,*

...  
(e) *erecting a building on land:*

...  
(ii) *on which an Aboriginal object is located or that is within an Aboriginal place of heritage significance,*

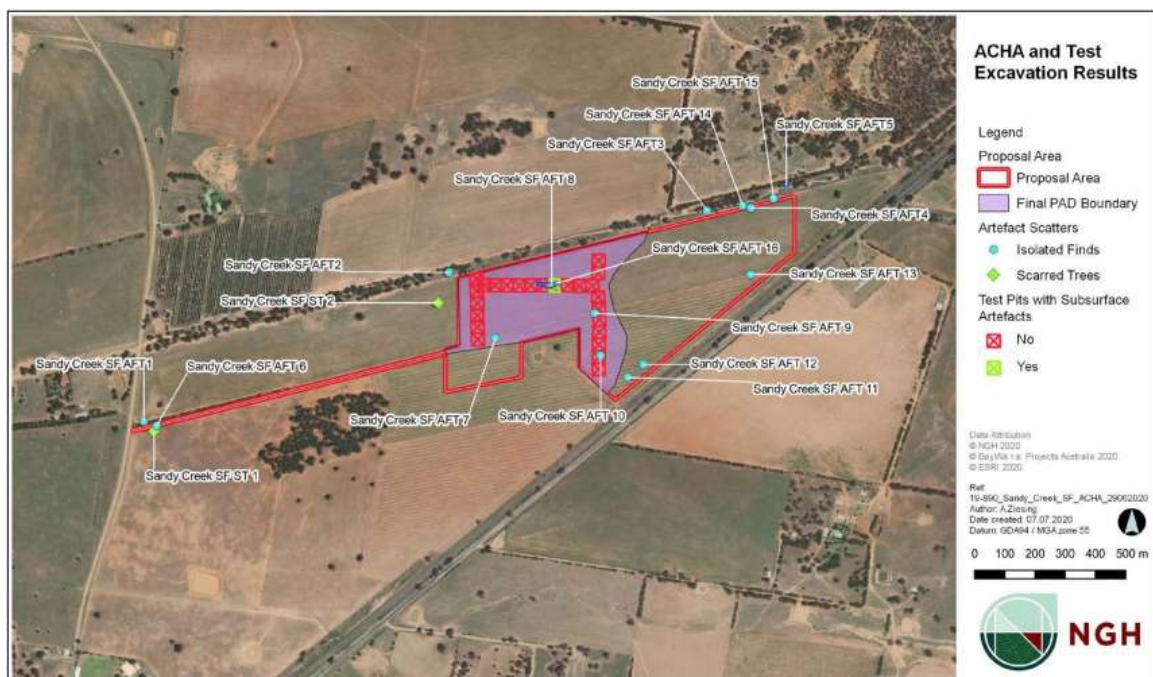


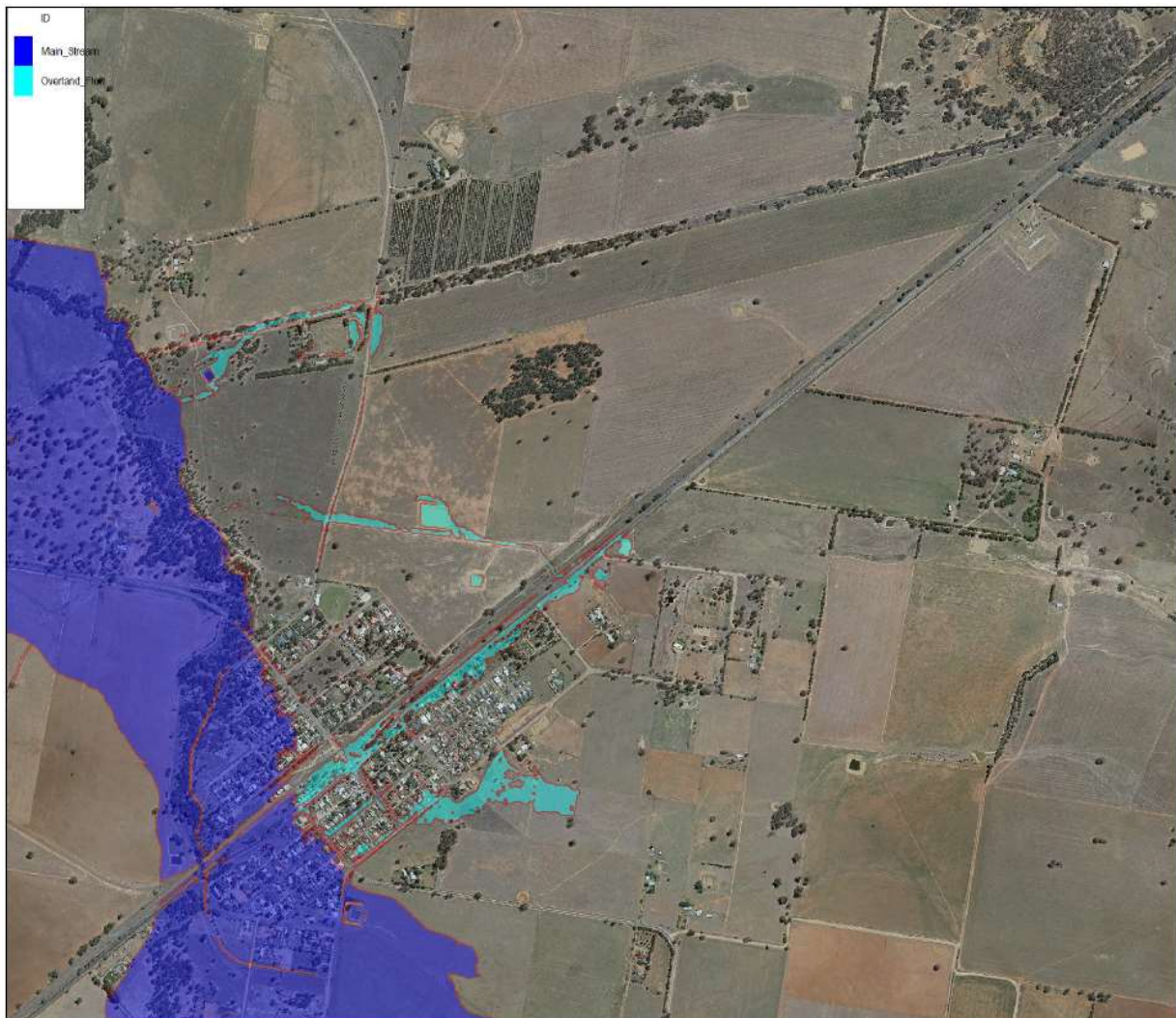
Figure 5 - ACHA results including artefacts and scarred trees



An Aboriginal Cultural Heritage Assessment identified 16 stone artefacts sites, including 13 within the development site. These sites include one artefact scatter (Sandy Creek SF AFT 2) and 12 isolated artefacts (Sandy Creek SF AFT 4, 5, 7, 8, 9, 10, 11, 12, 13, 14, 15 and 16). Two scarred trees (Sandy Creek SF ST 1 and 2) lie within the subject land but outside of the proposed development site and would not be impacted. The locations of these sites are shown on the figure above.

The proposed development will impact on a number of these identified sites and therefore requires approval. The submission of this Development Application satisfies this clause. It is noted that there are other parts of this clause that apply to an “Aboriginal place of heritage significance”, however the site is not such a place, as defined by the WWLEP 2010.

Clause 5.21 of the WWLEP 2010 applies to land within the “flood planning area”. Small parts of the overall site are mapped as such, for both mainstream flood and overland flow, however, all identified locations are remote from, and well clear of the development site, including internal accesses. It is noted that some overland flooding is identified crossing Churches Plain Rd.



*Figure 6 - Flood Mapping*



As the development is not directly impacted by flooding as identified under this clause, it is considered that the consent authority can be satisfied of the matters listed under 5.21(2), and specifically that the development:

- (a) is compatible with the flood function and behaviour on the land, and*
- (b) will not adversely affect flood behaviour in a way that results in detrimental increases in the potential flood affectation of other development or properties, and*
- (c) will not adversely affect the safe occupation and efficient evacuation of people or exceed the capacity of existing evacuation routes for the surrounding area in the event of a flood, and*
- (d) incorporates appropriate measures to manage risk to life in the event of a flood, and*
- (e) will not adversely affect the environment or cause avoidable erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses.*

The proposed development is clear of identified flooding, and thus is considered compatible with the flood function and behaviour on the land, will not adversely affect flood behaviour, will not adversely affect the safe occupation and efficient evacuation of people or exceed the capacity of existing evacuation routes for the surrounding area in the event of a flood (noting following the completion of works, the site will be largely unoccupied), does not require any special measures to manage risk to life from flood, and will not adversely affect the environment in ways described in part (e) with conditions of consent recommended to manage impacts on soil.

It is noted that an overland flow/stormwater assessment for the development site was carried out which concluded that proposed on site detention measures proposed are sufficient to ensure that post development flows from the site meet pre-development flows, demonstrating that flood affectation of other properties is not likely to increase.

5.21 of the LEP requires the consent authority to consider the following matters in deciding whether to grant consent on land to which clause 5.21 applies:

- (a) the impact of the development on projected changes to flood behaviour as a result of climate change,*
- (b) the intended design and scale of buildings resulting from the development,*
- (c) whether the development incorporates measures to minimise the risk to life and ensure the safe evacuation of people in the event of a flood,*
- (d) the potential to modify, relocate or remove buildings resulting from development if the surrounding area is impacted by flooding or coastal erosion.*

Council's flood studies have been prepared taking into effect the impact of climate change. No buildings or structures are proposed in the identified FPA. No special measures to manage risk to life from flood. There is no potential to modify or relocate buildings however given the location of flooding on the land, there is no identified need for this to occur.

All matters have been considered in full, and no issues of concern which should prevent the approval of the Development Application have been identified.

Clause 7.1A relates to earthworks and is as follows:

*(3) Before granting development consent for earthworks, the consent authority must consider the following matters:*

- (a) the likely disruption of, or any detrimental effect on, existing drainage patterns and soil stability in the locality,*
- (b) the effect of the proposed development on the likely future use or redevelopment*

- of the land,*
- (c) the quality of the fill or the soil to be excavated, or both,*
- (d) the effect of the proposed development on the existing and likely amenity of adjoining properties,*
- (e) the source of any fill material and the destination of any excavated material,*
- (f) the likelihood of disturbing relics,*
- (g) the proximity to and potential for adverse impacts on any watercourse, drinking water catchment or environmentally sensitive area.*

No substantial earthworks in the form of landshaping are proposed. Works will be restricted to the excavation of footings, laying infrastructure and the like. Given the relatively minor nature of the earthworks, impacts on drainage patterns, soil stability, and on watercourses is unlikely to be significant. This is supported by the overland flow/stormwater assessment prepared for the development site.

No fill is proposed to be imported to the site, nor is excavated material proposed to be removed. Material will be retained on site.

The proposed earthworks are to support the proposed development, but are not considered to compromise the future return of the land to agricultural purposes, given the relatively minor scale.

Given the location and scale of the earthworks impacts on the amenity of adjoining properties are unlikely to be significant. There are no 'relics' as defined under the WWLEP 2010 identified on the site (noting the Aboriginal objects do not fall under this definition and are separately assessed in this report).

All relevant matters under Clause 7.1A of the WWLEP 2010 have been considered in full and the development is considered acceptable with regard to these matters.

Clause 7.3 applies to land identified as "Biodiversity" on the 'Terrestrial Biodiversity Map' of the WWLEP 2010. Parts of the site, including the development site, are mapped as such as indicated on the mapping below:



Figure 7 - Clause 7.3 Biodiversity (Green), Clause 7.4 Vulnerable Land (Orange) and Clause 7.5 Riparian Lands and Waterways (Blue) Mapping

Clause 7.3 of the WWLEP 2010 requires that:

*(1) The objectives of this clause are to protect, maintain or improve the diversity of the native vegetation, including—*

- (a) protecting biological diversity of native flora and fauna, and*
- (b) protecting the ecological processes necessary for their continued existence, and*
- (c) encouraging the recovery of threatened species, communities or populations and their habitats.*

...

*(3) Development consent must not be granted to development on land to which this clause applies unless the consent authority has considered the following matters-*

- (a) any potential adverse impact of the proposed development on any of the following-*
  - (i) a native vegetation community,*
  - (ii) the habitat of any threatened species, population or ecological community,*
  - (iii) a regionally significant species of plant, animal or habitat,*
  - (iv) a habitat corridor,*
  - (v) a wetland,*
  - (vi) the biodiversity values within a reserve, including a road reserve or a stock route,*
- (b) any proposed measures to be undertaken to ameliorate any such potential adverse impact.*

*(4) Development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that the development is consistent with the objectives of this clause and-*

- (a) the development is designed, sited and managed to avoid any potential adverse environmental impact, or*
- (b) if a potential adverse impact cannot be avoided, the development-*
  - (i) is designed and sited so as to have minimum adverse impact, and*
  - (ii) incorporates effective measures so as to have minimal adverse impact, and*
  - (iii) mitigates any residual adverse impact through the restoration of any existing disturbed or modified area on the site.*

A biodiversity assessment was carried out for the site which identified that the development would involve the removal of approximately 42 hectares of non-native vegetation, including exotic pastures and crops. No existing trees are directly impacted by the development. Direct impacts to native vegetation have been avoided by the proposed development; however, the disturbance of groundcovers would constitute the removal of potential foraging habitat for fauna.

The SEE stated that:

*No threatened flora species, one threatened ecological community (TEC) and one threatened fauna species was observed during the site survey. The results of background searches identified 24 flora species, 4 Endangered Ecological Communities (EECs), 71 fauna species and 1 endangered population with the potential to occur within the locality. Assessments of Significance were conducted for certain species, either observed or considered likely to occur based on habitat or records, under the BC Act and EPBC Act to determine if the impacts are likely to be significant. The assessments concluded that there is unlikely to be a significant impact to these species, given that:*

- *The amounts of habitat to be removed or disturbed by the proposal is relatively small in the local context.*
- *No fragmentation or isolation of habitat would occur.*
- *No substantial contribution to any key threatening process would be expected.*
- *Mitigation measures would be implemented to prevent disruptions to the life cycle or harm to individual animals of these species.*
- *The proposal would not interfere with the recovery of these species.*

As such, upon review of the biodiversity assessment, the consent authority can be satisfied that matters set out under 7.3(3) have been considered, and potential adverse impacts are considered unlikely. Furthermore, in consideration of all matters, the consent authority can be satisfied that the development is consistent with the objectives of the clause and has been designed, sited and managed to avoid any potential adverse environmental impact. All matters under Clause 7.3 have been considered in full.

A very small part of the north-eastern tip of the site is mapped as 'vulnerable land' on the vulnerable land map. This mapped land is clear of the proposed development site.

Clause 7.4 states:

*(1) The objectives of this clause are to protect, maintain or improve the diversity and stability of landscapes, including—*

- (a) restricting development on land that is unsuitable for development due to steep slopes or shallow soils or both, and*
- (b) restricting development on land that is subject to soil salinity, and*
- (c) restricting the removal of native vegetation, and*
- (d) restricting development on land that is subject to permanent inundation, and*
- (e) restricting development on land with a high proportion of rock outcropping.*

*(2) This clause applies to land identified as "Vulnerable Land" on the Vulnerable Land Map.*

*(3) Development consent must not be granted to development that involves the disturbance of soil, including the erection of a building or the undertaking of a work, on the following land to which this clause applies unless the consent authority has considered the potential for any adverse impact on the land—*

- (a) land with a slope greater than 25%,*
- (b) land with a high proportion of rock outcropping,*
- (c) land subject to high erosion potential,*
- (d) land subject to soil salinity or impeded drainage,*
- (e) land subject to regular or permanent inundation.*

*(4) Development consent must not be granted for development on land to which this clause applies unless the consent authority is satisfied that the development is consistent with the objectives of this clause and—*

- (a) the development is—*
  - (i) designed, sited and managed to avoid any potential adverse impact on the land, and*
  - (ii) unlikely to affect the rate, volume and quality of water leaving the land, or*
- (b) if a potential adverse impact cannot be avoided, that the development—*
  - (i) is designed and sited so as to have minimum adverse impact, and*
  - (ii) incorporates effective measures to remedy or mitigate any adverse impact, and*

*(iii) provides for the rehabilitation of areas to maintain landscape stability, such as revegetation of areas subject to soil salinity and high erosion potential.*

The site is not identified as being of a kind listed in 7.4(3).

The consent authority can be satisfied that the development is consistent with all considerations under this clause, and that the potential impacts of the development on the matters listed are acceptable. The consent authority can be satisfied that the development is consistent with the objectives of the clause and the development is designed, sited and managed to avoid any potential adverse impact on the land and is unlikely to affect the rate, volume and quality of water leaving the land (noting the findings of the overland flow/stormwater assessment).

The Sandy Creek riparian area identified at the far western end of the site is identified as 'waterway' on the Water Resource Map.

Clause 7.5 states:

- (1) The objectives of this clause are to protect or improve—
  - (a) water quality within waterways, and
  - (b) stability of the bed and banks of waterways, and
  - (c) aquatic and riparian habitats, and
  - (d) ecological processes within waterways and riparian areas, and
  - (e) threatened aquatic species, communities, populations and their habitats, and
  - (f) scenic and cultural heritage values of waterways and riparian areas, and
  - (g) catchment protection to prevent increased sediment loads and stream bank erosion from entering lakes, rivers and waterways.*
- (2) This clause applies to all of the following—
  - (a) land identified as "Water" on the Water Resource Map,
  - (b) land identified as "Waterway" on that map,
  - (c) all land that is within 40 metres of the bank or shore (measured horizontally from the top of the bank or shore) of each waterway on land identified as "Waterway" on that map.*
- (3) Development consent must not be granted to development on land to which this clause applies unless the consent authority has considered the following matters—
  - (a) any potential adverse impact on any of the following—
    - (i) water quality within the waterway,
    - (ii) aquatic and riparian habitats and ecosystems,
    - (iii) stability of the bed, shore and banks of the waterway,
    - (iv) the free passage of fish and other aquatic organisms within or along the waterway,
    - (v) habitat of any threatened species, population or ecological community,
  - (b) whether or not it is likely that the development will increase water extraction from the waterway for domestic or stock use and the potential impact of any extraction on the waterway,
  - (c) proposed measures to ameliorate any potential adverse impact.*
- (4) Development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that the development is consistent with the objectives of this clause and—
  - (a) the development is designed, sited and managed to avoid any potential adverse*



*environmental impact, or*

*(b) if a potential adverse impact cannot be avoided, the development—*

*(i) is designed and sited so as to have minimum adverse impact, and*

*(ii) incorporates effective measures so as to have minimal adverse impact, and*

*(iii) mitigates any adverse impact through the restoration of any existing disturbed area on the land.*

Given the distance of the creek and mapped land from the development site, the consent authority can be satisfied that all matters have been satisfied, that the development is consistent with the objectives of the clause, that the development will not adversely impact on the matters listed, and that the development has been designed, sited and managed to avoid any potential adverse environmental impact .

Clause 7.9 requires that Council consider the impact of developments on the primacy of the Wagga Wagga Central Business area. The development is for a solar farm which could not be reasonably housed in the Wagga Wagga CBD. Therefore the development is considered unlikely to impact on the primacy of the existing CBD.

There are no other provisions of the WWLEP 2010 relevant to the development.

### **State Environmental Planning Policies**

#### State Environmental Planning Policy No 55 - Remediation of Land

Clause 7 of SEPP 55 requires that:

*(1) A consent authority must not consent to the carrying out of any development on land unless:*

*(a) it has considered whether the land is contaminated, and*

*(b) if the land is contaminated, it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the purpose for which the development is proposed to be carried out, and*

*(c) if the land requires remediation to be made suitable for the purpose for which the development is proposed to be carried out, it is satisfied that the land will be remediated before the land is used for that purpose.*

*(2) Before determining an application for consent to carry out development that would involve a change of use on any of the land specified in subclause (4), the consent authority must consider a report specifying the findings of a preliminary investigation of the land concerned carried out in accordance with the contaminated land planning guidelines.*

*(3) The applicant for development consent must carry out the investigation required by subclause (2) and must provide a report on it to the consent authority. The consent authority may require the applicant to carry out, and provide a report on, a detailed investigation (as referred to in the contaminated land planning guidelines) if it considers that the findings of the preliminary investigation warrant such an investigation.*

*(4) The land concerned is:*

*(a) land that is within an investigation area,*

*(b) land on which development for a purpose referred to in Table 1 to the contaminated land planning guidelines is being, or is known to have been, carried out,*

*(c) to the extent to which it is proposed to carry out development on it for residential, educational, recreational or child care purposes, or for the purposes of a hospital-land:*

*(i) in relation to which there is no knowledge (or incomplete knowledge) as to whether development for a purpose referred to in Table 1 to the contaminated*

*land planning guidelines has been carried out, and*  
*(ii) on which it would have been lawful to carry out such development during any period in respect of which there is no knowledge (or incomplete knowledge).*

With respect to SEPP 55, the land has been used for agricultural activities which are listed as a potentially contaminating land use in Table 1 of the *Managing Land Contamination Planning Guidelines*. The site of the development is in an area used historically for cropping and grazing, and not agricultural activities more regularly associated with contamination such as horticulture, stockyards, or storage shed. There was no evidence of contamination on the site of the development during site inspections and the site is not listed on the Council potentially contaminated land register. The proposed development is for a solar farm and is not of a kind that is sensitive to contamination.

Matters under SEPP 55 have been considered in full, and for the reasons outlined above, the site is not considered to be contaminated, and the consent authority can be satisfied that the site is suitable for the proposed development.

State Environmental Planning Policy (Infrastructure) 2007

Under Clause 34 of SEPP (Infrastructure) 2007:

*(1) Development for the purpose of electricity generating works may be carried out by any person with consent on the following land—*

*...*

*(b) in any other case—any land in a prescribed rural, industrial or special use zone.*

As noted under the WWLEP 2010 assessment, electricity generating works are permissible with consent in the RU1 zone. Notwithstanding, should any prohibition be in place, clause 34 of the Infrastructure SEPP would override the local provisions.

It is relevant to note that the state environmental planning policy through this permissibility recognises at a general scale that rural zones are zones capable of housing electricity generating works.

Section 45 of SEPP (Infrastructure) 2007 states that:

*(1) This clause applies to a development application (or an application for modification of a consent) for development comprising or involving any of the following—*

*(a) the penetration of ground within 2m of an underground electricity power line or an electricity distribution pole or within 10m of any part of an electricity tower,*

*(b) development carried out—*

*(i) within or immediately adjacent to an easement for electricity purposes (whether or not the electricity infrastructure exists), or*

*(ii) immediately adjacent to an electricity substation, or*

*(iii) within 5m of an exposed overhead electricity power line,*

*(c) installation of a swimming pool any part of which is—*

*(i) within 30m of a structure supporting an overhead electricity transmission line, measured horizontally from the top of the pool to the bottom of the structure at ground level, or*

*(ii) within 5m of an overhead electricity power line, measured vertically upwards from the top of the pool,*

*(d) development involving or requiring the placement of power lines underground, unless an agreement with respect to the placement underground of power lines is in force between the electricity supply authority and the council for the land concerned.*

*(2) Before determining a development application (or an application for modification of a consent) for development to which this clause applies, the consent authority must—*

- (a) give written notice to the electricity supply authority for the area in which the development is to be carried out, inviting comments about potential safety risks, and*
- (b) take into consideration any response to the notice that is received within 21 days after the notice is given.*

The development is proposed in proximity to electrical infrastructure and was referred to Essential Energy and Transgrid under this Clause. In response, Essential Energy made the following comments as to potential safety risks arising from the proposed development.

- 1. The proposed site perimeter fencing must maintain a distance of at least 10.0 metres from the centreline from the high voltage overhead powerlines located along the southern boundaries. Although the distance is not specifically marked, documents submitted show the asset protection zone as being 10.0 metres wide, and as the drawing is scaled, this would indicate that the powerline would be greater than 10.0 metres from the edge of the proposed fence.*
- 
- 2. With regards to the proposed screening vegetation, the planting or cultivation of trees or shrubs which grow to a height exceeding 3.0 metres is NOT permitted within 10 metres of the centreline of the overhead powerlines.*

Submitted plans indicate compliance with these comments, however, it is recommended that conditions of consent reinforcing this be imposed nonetheless. Essential Energy also made a number of standard general comments. It is recommended that these be conditioned where relevant.

No response was received from Transgrid.

Clause 85 of the Infrastructure SEPP applies to certain land adjacent to rail corridors and is follows:

*(1) This clause applies to development on land that is in or adjacent to a rail corridor, if the development—*

- (a) is likely to have an adverse effect on rail safety, or*
- (b) involves the placing of a metal finish on a structure and the rail corridor concerned is used by electric trains, or*
- (c) involves the use of a crane in air space above any rail corridor, or*
- (d) is located within 5 metres of an exposed overhead electricity power line that is used for the purpose of railways or rail infrastructure facilities.*

*(2) Before determining a development application for development to which this clause applies, the consent authority must—*

- (a) within 7 days after the application is made, give written notice of the application to the rail authority for the rail corridor, and*
- (b) take into consideration—*
  - (i) any response to the notice that is received within 21 days after the notice is given, and*
  - (ii) any guidelines that are issued by the Secretary for the purposes of this clause and published in the Gazette.*

In relation to Clause 85, the development is in proximity to the Main Southern Railway (the



corridor being approximately 40m from the development site). The development was referred to the rail authority for the corridor being ARTC due to potential glint and glare impacts from the development. ARTC did not provide a response.

Clause 85(2)(b)(ii) directs the consent authorities to guidelines adopted for the purpose of the clause. The guidelines 'Development Near Rail Corridors and Busy Roads – Interim Guideline' have been adopted under the clause. Part D of the guidelines relates to 'potential impact of adjacent development on roads and railways'. Most considerations are not relevant to development of this kind, however section 5.8, has provisions relating to glare from reflective surfaces. The section includes the following recommendations:

*Recommended measures associated with lighting and external finishes:*

- *Consider potential impacts at the design stage taking into account site aspect, shadowing and the pattern of sun movement*
- *Where possible, avoid reflective finishes (metal, glass) on facades which face the rail or road corridor*
- *Use non-reflective walls, additional landscaping and screenings as additional line-of-sight measures*
- *All outdoor lighting should adhere to AS 4282-1997 Control of Obtrusive Effects of Outdoor Lighting*

*Specific lighting requirements for the rail corridor:*

*Red and green lights which are used in signalling systems should be avoided in all signs, lighting or building colour schemes on any part of a building which faces the rail corridor.*

A Glint and Glare assessment was carried out for the development considered impacts on the rail corridor. The assessment determined that while glint and glare impacts could occur on the railway, that upon establishment of vegetative buffers this impact would be eliminated. The assessment also established that if the resting angle of the panels was increased from 0 to 5 degrees that glint and glare impacts on the railway could be eliminated during the establishment of the buffer plantings. Conditions to reinforce these measures have been recommended. Therefore, glint and glare impacts on the railway are considered acceptable. On this basis, it is considered that the proposed development is consistent with the Guidelines.

It is noted that a more detailed assessment of glint and glare impacts, including on the railway, is set out in part (b) of this assessment report.

Clause 101 of the SEPP applies to development with frontage to a classified road. The Olympic Highway is a classified road. Clause 101(2) states that:

*(2) The consent authority must not grant consent to development on land that has a frontage to a classified road unless it is satisfied that—*

- (a) where practicable and safe, vehicular access to the land is provided by a road other than the classified road, and*
- (b) the safety, efficiency and ongoing operation of the classified road will not be adversely affected by the development as a result of—*

- (i) the design of the vehicular access to the land, or*
- (ii) the emission of smoke or dust from the development, or*
- (iii) the nature, volume or frequency of vehicles using the classified road to gain access to the land, and*

*(c) the development is of a type that is not sensitive to traffic noise or vehicle emissions, or is appropriately located and designed, or includes measures, to ameliorate potential traffic noise or vehicle emissions within the site of the development arising from the adjacent classified road.*

Access to the site is not proposed via the classified road, and instead is via Churches Plain Rd. Therefore it is considered that 2(a) and (b)(i) are satisfied. With regard to 2(b)(ii) it is considered that the development is not of a kind that will result on the emission of smoke or dust that will impact on the classified road. Finally, with regard to 2(b)(iii), the development will result in a minor temporary increase in vehicles accessing the land during construction. The SEE identifies average daily heavy vehicle movements during construction will peak at 6 movements a daily, whilst light vehicle movements will peak at 40 movements a day. In the context of the classified road this is only a very minor increase in vehicles. The development was referred to TfNSW who advised that “the intersection of the local road network (Yarragundry Street) with the classified road network (Olympic Highway) along the submitted transport route...is considered to be to an adequate standard and will not require any upgrade as a result of this development”. TfNSW raised no objection to the proposed development subject to the imposition of conditions requiring the submission of a Traffic Management Plan, and clarifying that the development shall be at no cost to TfNSW.

All matters under 101(2) and the consent authority can be satisfied that the development achieves compliance.

#### State Environmental Planning Policy (Koala Habitat Protection) 2020

The Koala SEPP 2020 applies to the site.

The SEPP requires that the consent authority first consider if the land is “potential koala habitat”. Given that the development site avoids all trees, it is considered that the site is not “potential koala habitat”. Therefore, there is no impediment under this SEPP to granting consent to the proposed development.

#### State Environmental Planning Policy (State and Regional Development) 2011

SEPP (State and Regional Development) 2011 sets out what development is “state significant development” and “regionally significant development” for the purposes of the *Environmental Planning and Assessment Act 1979*.

Clause 20 of the SEPP states that:

*(1) Development specified in Schedule 7 is declared to be regionally significant development for the purposes of the Act.*

Schedule 7 of the SEPP includes:

#### *5 Private infrastructure and community facilities over \$5 million*

*Development that has a capital investment value of more than \$5 million for any of the following purposes—*

*(a)...electricity generating works...*

As the capital investment value of the proposed development is over \$5 million (approximately \$19 million) the development is considered to be ‘regionally significant development’. In accordance with the *Environmental Planning and Assessment Act 1979* the Southern

Regional Planning Panel has the functions of the consent authority for regionally significant development.

**(a)(ii) - The provisions of any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Secretary has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved)**

There are no draft environmental planning instruments relevant to this Development Application.

**(a)(iii) - Any development control plan**  
Wagga Wagga Development Control Plan 2010

The WWDCP 2010 applies to the land. The relevant provisions of the WWDCP 2010 are addressed as follows:

#### 1.5 Guiding Principles

The guiding principles of the WWDCP 2010 are as follows:

*GP1 Sustainability, climate change management, and efficient use of resources*

- i. To protect and enhance the viability of natural systems*
- ii. To achieve good environmental outcomes*
- iii. To manage incremental change to retain sustainable outcomes*
- iv. To support waste minimisation strategies*
- v. To protect the indigenous, European and natural heritage*
- vi. To avoid use of rainforest and old growth timbers*

*GP2 Site responsive development*

- i. To design for compatibility with topography, physical characteristics and setting*
- ii. To achieve a positive contribution to the streetscape and/or natural environment*

*GP3 Design quality*

- i. To achieve quality sustainable development*
- ii. To respond to site conditions*

*GP4 Quality public domain*

- i. To achieve vibrant and attractive public spaces*
- ii. To enhance opportunities for community connection*
- iii. To design for crime prevention and public safety*

The proposed development is considered to be consistent with these Guiding Principles as set out by this assessment.

#### 1.10 - Notification of a Development Application

The application was placed on public exhibition from 5<sup>th</sup> November 2021 to 19<sup>th</sup> November 2021 in accordance with the provisions of the WWDCP 2010. 27 public submissions were received, all of which were unique. 11 of the submissions received were identified as being local to the vicinity of the development, being located in the village of Uranquinty, or nearby rural properties.

Submissions were received from Essential Energy, the Natural Resource Access Regulator, Transport for NSW, Local Land Service and Heritage NSW during the course of the Development Application.

Submissions are discussed in part (d) of this assessment report.

Section 2 - Controls the Apply to All Development

2.1 Vehicle access and movements

*C1 Access should be from an alternative secondary frontage or other non-arterial road where possible.*

Access is proposed via Churches Plain Rd which is considered to be a secondary frontage to the site.

*C2 A Traffic Impact Study may be required where adverse local traffic impacts may result from the development. The traffic impact study is to include the suitability of the proposal in terms of the design and location of the proposed access, and the likely nature, volume or frequency of traffic to be generated by the development.*

A Traffic Impact Assessment was prepared for the development. The TIA identified that during peak construction, an average of 46 vehicles movements a day would be associated with the site, being 40 light vehicle movements and 6 heavy vehicles. This peak is not for the duration of the 9 month construction, with the peak occurring during months 3 to 6 (inclusive). Outside of these months, this reduces to an average 2-3 heavy vehicles movements a day, and between 16 and 32 light vehicle movements a day.

Overall, this is considered to result in negligible impact on the road network, and for residents living along the route, given the relatively small number of vehicle movements and the finite time frame within which the impacts will exist.

The TIA recommended a "Construction Traffic Management Plan be prepared for the gravel section of Churches Plain Road (750m) from the end of the seal at Baker Street and the Solar Farm Access Gate to ensure the gravel pavement is maintained to accommodate construction traffic and other road users". It is recommended that conditions to this end be incorporated into any consent, noting that it can be incorporated into the traffic management plan recommended by TfNSW.

It is noted that the TIA has provided turning paths for an articulated semi-trailer through Uranquinty. It shows that the geometry of the intersections is on the limit of being able to accommodate the turning paths. This being the case, along with the local road network pavement most likely only being designed for residential traffic loads there is a possibility that the roads (and associated shoulders) will be damaged as a result of the additional traffic.

Therefore it is recommended that a condition of consent be imposed requiring the preparation of pre and post development dilapidation reports to document the road and verge conditions from the Olympic Highway to the site entrance before and after construction with a requirement to repair any damage and return the roads to pre-development condition at the conclusion of the work.

*C3 Vehicles are to enter and leave in a forward direction unless it can be demonstrated that site conditions prevent it.*

The design of the site enables vehicles to enter and exit in a forward direction.

*C4 Provide adequate areas for loading and unloading of goods on site. The loading space and facilities are to be appropriate to the scale of development.*

Adequate area exists on site for the loading and unloading of vehicles.

*C5 Access driveways are to be located in accordance with the relevant Australian Standard at the time of lodgement of an application.*

It is recommended that standard conditions of consent be imposed to ensure compliance with this control.

*C6 Ensure adequate sight lines for proposed driveways.*

No concerns are raised with regard to driveway sightlines.

## 2.2 Off-street parking

*C1 Parking is to be provided in accordance with the table below. For uses not listed, similar land uses should be used as a guide in assessing car parking requirements.*

Electricity generating works are not listed in the parking table of the WWDCP 2010. Given the small number of staff associated with the ongoing operation of the facility, formal parking is not considered necessary. During construction a temporary parking area will be necessary. It is recommended that a condition of consent be imposed requiring the submission of a Construction Management Plan. Temporary construction parking would form part of any such CMP.

*C2 The design and layout of parking is to be in accordance with the relevant Australian Standard at the time of lodgement of an application.*

*C3 Parking spaces are to be provided for disabled persons. Accessible parking spaces to comply with the relevant Australian Standard at the time of lodgement of an application.*

As noted, formal ongoing parking is not proposed.

*C4-C7 are not relevant to this development*

*C8 A traffic and parking study may be required for certain proposals, including but not limited to proposals for schools and other education uses including child care centres, business parks, hospitals, cinemas and gyms.*

A TIA has been prepared for the development. A specific parking study is not considered necessary.

*C9 Provide trees within the parking area at a rate of 1 tree per 5 spaces in a row. Each tree to have a minimum mature spread of 5m and to be located in a planting bed with minimum width of 1.5m (between back of kerbs) and minimum area of 3.5m<sup>2</sup>.*

*C10 Planting beds located within a car park are to have a subsoil drainage system connected into the stormwater system of the site.*

*C11 To ensure sightlines are maintained for drivers and pedestrians, trees used within or adjacent to car parking areas shall have a minimum clear trunk height of 2.5m, with shrubs and ground covers not to exceed 500mm in height.*

As noted, formal ongoing parking is not proposed.

## 2.3 Landscaping

*C1 A landscape plan is required for applications for :*

- *Commercial and Industrial developments*
- *Residential development (other than dwelling houses).*

*C2 Natural features at the site, such as trees, rock outcrops, cliffs, ledges and indigenous species and vegetation communities are to be retained and incorporated into the design of the development.*

*C3 Use native and indigenous plants, especially low water consumption plants in preference to exotic species.*

*C4 Trees should be planted at the front and rear of properties to provide tree canopy.*

*C5 Provide landscaping in the front and side setback areas, and on other parts of the site to improve the streetscape, soften the appearance of buildings and paved areas, and to provide visual screening.*



- C6 *Landscaping should provide shade in summer without reducing solar access in winter. Limited use of deciduous species is acceptable where used to achieve passive solar design.*

The development requires landscaping to help mitigate visual and glint and glare impacts. The need for such landscaping is discussed throughout the report. It is recommended that conditions of consent be imposed requiring the submission of a detailed landscape plan, along with an ongoing landscape strategy for the ongoing management and maintenance of the plantings.

#### 2.4 Signage

No signage is proposed. The controls in this section are not relevant.

#### 2.5 Safety and security

- C1 *Use good site planning to clearly define public, semi-public and private areas.*  
 C2 *Entries are to be clearly visible and identifiable from the street, and are to give the resident/occupier a sense of personal address and shelter. For non-residential uses, administration offices or showroom are to be located at the front of the building.*  
 C3 *Minimise blank walls along street frontages.*  
 C4 *Avoid areas of potential concealment and 'blind' corners.*  
 C5 *Provide lighting to external entry areas, driveways and car parks in accordance with the relevant Australian Standards. The lighting is to be designed and sited to minimise spill and potential nuisance to adjoining properties.*  
 C6 *Planting and fencing is not to reduce the safety of users or compromise areas of natural surveillance.*  
 C7 *Where a site provides a pedestrian through route the access path is to be clearly defined and sign posted, appropriately lit, and have satisfactory visibility.*  
 C8 *Locate public toilets and rest areas to promote their use, and maximise public surveillance without creating visual intrusion*

The site will be secured by an approximately 2 metre high perimeter fence around the area that is to be developed, along with possible CCTV and remote monitoring. The fence will be placed behind a landscape buffer which will reduce the impact of the fence in the rural landscape.

It is recommended that the ongoing use of the solar farm be managed via an Operational Environmental Management Plan that will include site safety and security measures. The development is not anticipated to create a crime risk and appropriate security measures have been addressed.

#### 2.6 Erosion and Sediment Control Principles

There are no specific controls in this section. Standard conditions of consent to manage construction are recommended.

#### 2.7 Development adjoining open space

The site does not adjoin open space.

### Section 3 Heritage Conservation

There are no specific controls in this section of the WWDCP 2010 in relation to items of Aboriginal cultural heritage.

#### 4.1 Bushfire

Parts of the site, in the vicinity of Sandy Creek, and in the far northeastern tip of the site, are mapped as being bushfire prone. The development site itself is not coincident with these areas.

Notwithstanding, it is considered that unmapped portions of the site constitute a potential grassland hazard and potential woodland hazard and thus the provisions of Planning for Bushfire Protection 2019 are considered.

The relevant section of PBP2019 is Chapter 8 that includes controls for specific types of development including solar farms and notes:-

In order to comply with PBP the following conditions must be met:

- *satisfy the aim and objectives of PBP outlined in Chapter 1;*
- *consider any issues listed for the specific purpose for the development set out in this chapter; and*
- *propose an appropriate combination of Bushfire Protection Measures.*

The aim of PBP is to provide for the protection of human life and minimise impacts on property from the threat of bush fire, while having due regard to development potential, site characteristics and protection of the environment.

*The objectives are to:*

- *afford buildings and their occupants protection from exposure to a bush fire;*
- *provide for a defensible space to be located around buildings;*
- *provide appropriate separation between a hazard and buildings which, in combination with*
- *other measures, prevent the likely fire spread to buildings;*
- *ensure that appropriate operational access and egress for emergency service personnel and*
- *occupants is available;*
- *provide for ongoing management and maintenance of BPMs; and*
- *ensure that utility services are adequate to meet the needs of firefighters.*

Buildings proposed on site include inverter building and control rooms and will have no permanent occupants. Persons visiting the site will be for maintenance purposes only.

The site is accessible from the entrance off Churches Plain Road and access tracks within the site are of a sufficient width to allow access by emergency vehicles.

Ongoing management of BPMs can be achieved via an Operational Environmental Management Plan.

Specific controls for solar farms are provided under section 8.3.5 as follows:-

- *a minimum 10m APZ for the structures and associated buildings/infrastructure; and*
- *the APZ must be maintained to the standard of an Inner Protection Area (IPA) for the life of the development.*

*Infrastructure for the purposes of requiring APZ excludes*

- *road access to the site and*
- *power or other services to the site and associated fencing.*

The SEE notes that a minimum 10 metre wide Asset Protection Zone is proposed on all sides of the solar array and ancillary buildings. It is recommended that this be conditioned. The SEE also recommends that future landscaping be in accordance with Appendix 4 of PBP 2019 to ensure the APZ is not compromised.

*A Bush Fire Emergency Management and Operations Plan should identify all relevant risks and mitigation measures associated with the construction and operation of the...solar farm.*

*This should include:*

- *detailed measures to prevent or mitigate fires igniting;*
- *work that should not be carried out during total fire bans;*
- *availability of fire-suppression equipment, access and water;*
- *storage and maintenance of fuels and other flammable materials;*
- *notification of the local NSW RFS Fire Control Centre for any works that have the potential to ignite surrounding vegetation, proposed to be carried out during a bush-fire fire danger period to ensure weather conditions are appropriate; and*
- *appropriate bush fire emergency management planning.*

*It is important to be aware of operations that may be carried out on days of Total Fire Ban and any prohibited activities or exemptions that are notified by the Commissioner of the NSW RFS under the RF Act s.99.*

A recommended condition of consent requires the preparation of a Bush Fire Emergency Plan in consultation with local NSW RFS and Fire & Rescue NSW in accordance with PBP 2019 as well as bush fire protection measures and maintenance being included in the ongoing Operational Environmental Management Plan for the site.

Other conditions of consent, including requiring that internal access arrangements, water supply requirements and electricity and gas comply with the requirements of PBP 2019 are recommended. It is noted that PBP 2019 requires alternative access for dwellings where internal roads exceed 200m. This is unable to be provided in the case of the proposed development, however, as the development is not for a dwelling, and given the context of the site, this is considered acceptable.

#### 4.2 Flooding

Parts of the subject site is identified as prone to overland and creek mainstream flooding. There are no controls in the WWDCP 2010 for this type of flooding. Furthermore, the flood affected part of the site is not impacted by the solar farm development in any way and therefore flood controls in this section of the DCP are not applicable to this development. Flooding is discussed in more detail under clause 5.21 of the WWLEP 2010.

#### 5.4 Environmentally Sensitive Land

The controls in this section require the preparation of specialist reports for development on land identified as “biodiversity”, “vulnerable land” and ‘waterway’ under clause 7.3-7.5 of the WWLEP 2010. It is considered that these matters have been appropriately addressed in the SEE, as relevant. In relation to ‘waterway’, whilst the SEE does not specifically address the control, given the distance of the site to the mapped land, and detail provided in the SEE, a specialist report in this instance is not considered necessary.

#### 8.1 Development in rural areas

The following objectives and controls apply to developments in rural areas:



- O1 *Ensure that rural developments are compatible with site context.*
- O2 *Minimise potential for conflicts between traditional and productive agricultural uses and non-agricultural uses.*
- O3 *Ensure that adequate buffers are provided so that dwellings do not interfere with the right to farm adjoining or adjacent land*
- O4 *Ensure safe and adequate servicing and access arrangements.*

The development is significantly different to other development in the locality, but consistent with the changing character of rural areas across the state in response to the essential need to increase the provision of renewable energy. As discussed in part(a) this is a necessary change to the character of rural areas, as part of the ongoing evolution and development of rural areas in NSW since European settlement. The development itself is not a sensitive land use or likely to be incompatible with agricultural activities on the remainder of the site or adjoining properties.

- C1 *Uses are to be compatible with the character of the locality in terms of buildings, structures and the nature of operations.*

Structures proposed differ from the prevailing rural-agricultural character of the area, although it is noted that non-rural structures and uses do exist in the locality, including a railway line, major highway, a model aeroplane club, electrical infrastructure, and a nearby gas fired power station.

Large scale solar farms, including much larger than that proposed, are being developed across the state predominantly in rural locations where there is access to large areas of land close to transmission infrastructure. The need to reduce carbon emissions to reduce the impacts on climate change necessitate the development of this type of energy infrastructure, and the impacts or changes in character that they lead too. Measures have been proposed, such as site screening, to help minimise these impacts, and help with the compatibility of the development with the character of the locality.

Apart from the potential for construction, visual and glint and glare impacts, potential impacts on the local community from solar farms are relatively minor. In terms of the character or nature of operations they are unlikely to be incompatible with adjoining land uses. In the case of the subject development, impacts are considered manageable and acceptable.

- C2 *Provide adequate buffer areas and setbacks to minimise potential conflicts with adjoining lawful land uses. Where there is potential for a conflict between land uses, priority will be given to the existing productive use.*

The proposal includes 5 metre wide landscape buffers of native revegetation along the southern and eastern boundaries of the site to soften and screen the installation to neighbouring properties.

There is potential for some visual impacts to still occur, however, land use conflicts as such are not anticipated.

- C3 *Use landscaping and other screening options to help integrate new uses and developments into the rural landscape.*

The proposed landscape buffers together with other features of the landscape, including existing vegetation and the railway embankment, help to screen and integrate the development into the landscape. It is acknowledged that the proposed and existing vegetation will not be able to completely screen the solar farm but it will assist in the softening of the development site.

The proposed development will change the existing character of the rural landscape by the introduction of a significant array of solar panels. The existing character of relatively flat open land will remain but will take on a different appearance through the introduction of the solar farm which will be visible from many different locations and from existing properties across the locality.

A detailed visual assessment has been prepared and is discussed in greater detail within the impacts section of this report. The assessment concluded that overall the impacts are deemed to be acceptable.

*C4 Uses must be capable of operating within capacities of available existing services.*  
Electricity infrastructure will be upgraded to enable connection to the electricity grid.

*C5 Provide adequate facilities for additional traffic in terms of vehicle access and movements, parking areas, and loading and unloading of goods.*

The development will not generate any significant traffic movements to and from the site once it is operational. A Construction Management Plan is recommended to manage construction related matters such as parking, loading and unloading areas.

*C6 In the case of larger projects Council may require the applicant to demonstrate that the roads in the locality are of satisfactory construction and condition to accommodate the size, weight and volume of vehicles that could be generated by the use, and that the local traffic conditions are suitable.*

As noted under 2.1, the TIA has provided turning paths for an articulated semi-trailer through Uranquinty. It shows that the geometry of the intersections is on the limit of being able to accommodate the turning paths. This being the case, along with the local road network pavement most likely only being designed for residential traffic loads there is a possibility that the roads (and associated shoulders) will be damaged as a result of the additional traffic.

A condition of consent requiring pre and post development dilapidation reports, with a requirement to make good any damage, have been recommended.

In addition to the above, the TIA recommended a "Construction Traffic Management Plan be prepared for the gravel section of Churches Plain Road (750m) from the end of the seal at Baker Street and the Solar Farm Access Gate to ensure the gravel pavement is maintained to accommodate construction traffic and other road users". It is recommended that conditions to this end be incorporated into any consent.

*C7 Provide satisfactory arrangements for storage and disposal of waste.*

The Construction Management Plan is required to include details regarding waste management during works as well as appropriate disposal details.

There are no other provisions of the WWDCP 2010 relevant to the proposed development.

**(a)(iia) - any planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4, and**

No related planning agreement has been entered into under section 7.4.

**(a)(iv) - the regulations (to the extent that they prescribe matters for the purposes of this paragraph)**

92A Additional matters that consent authority must consider for Wagga Wagga

Clause 92A applies to development in the Wagga Wagga Local Government Area and is as follows:

*(1) In determining a development application for development on land to which Wagga Wagga Local Environmental Plan 2010 applies, the consent authority must take into consideration whether the development is consistent with the Wagga Wagga Special Activation Precinct Master Plan published by the Department in April 2021.*

*(2) This clause does not apply to a development application made on or after 31 December 2021.*

*(3) This clause prescribes matters for the purposes of section 4.15(1)(a)(iv) of the Act.*

The development site is not in proximity to the Wagga Wagga Special Activation Precinct Master Plan area. It is considered given this remoteness that the development is consistent with the Master Plan.

**(b) - the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality, Context and setting**

The development is proposed in a rural area, which is agricultural in character, interspersed with non-agricultural uses and infrastructure, including the Main Southern Railway, the Olympic Highway, a model aeroplane club, the Army Recruit Training Centre, and a gas fired power station.

The development represents a change in character in the area as part of the evolution of rural areas to accommodate Australia's increasing renewable energy needs. Impacts are largely visual in nature, with other incompatibilities non-significant. Agricultural operations on surrounding land are unlikely to be impacted by the proposed development.

**Visual Impacts – BLM Assessment**

A visual impact assessment was carried out for the proposed development. The VIA methodology was based on the *Bureau of Land Management (BLM) Visual Resource Management System*, developed by the BLM, US Department of the Interior.

The methodology is based on the concept that the degree to which a development affects the visual landscape depends on the visual contrast imposed by the project.

Per the SEE, the key steps undertaken to assess the visual impact are as follows:

- *Define Landscape Management Zones (LMZ) for the representative viewpoints, based on:*
  - *The scenic quality of the study area's LCU.*
  - *The expected sensitivity at representative viewpoints.*
  - *The proximity of each representative viewpoint.*
- *Evaluate the degree of contrast the solar farm would generate at representative viewpoints in consideration of the management objectives of the relevant LMZ.*
- *Determine the acceptability of the contrast with the management objectives of the relevant LMZ; this is the resultant visual impact, rated as high, medium, or low.*

The methodology is considered a reasonable approach to assist in quantifying visual impacts, but should not supersede consideration of the individual circumstances at a particular site.

Using the BLM process, a range of receivers were assessed, using a range of viewpoints. The location of these viewpoints are illustrated below:

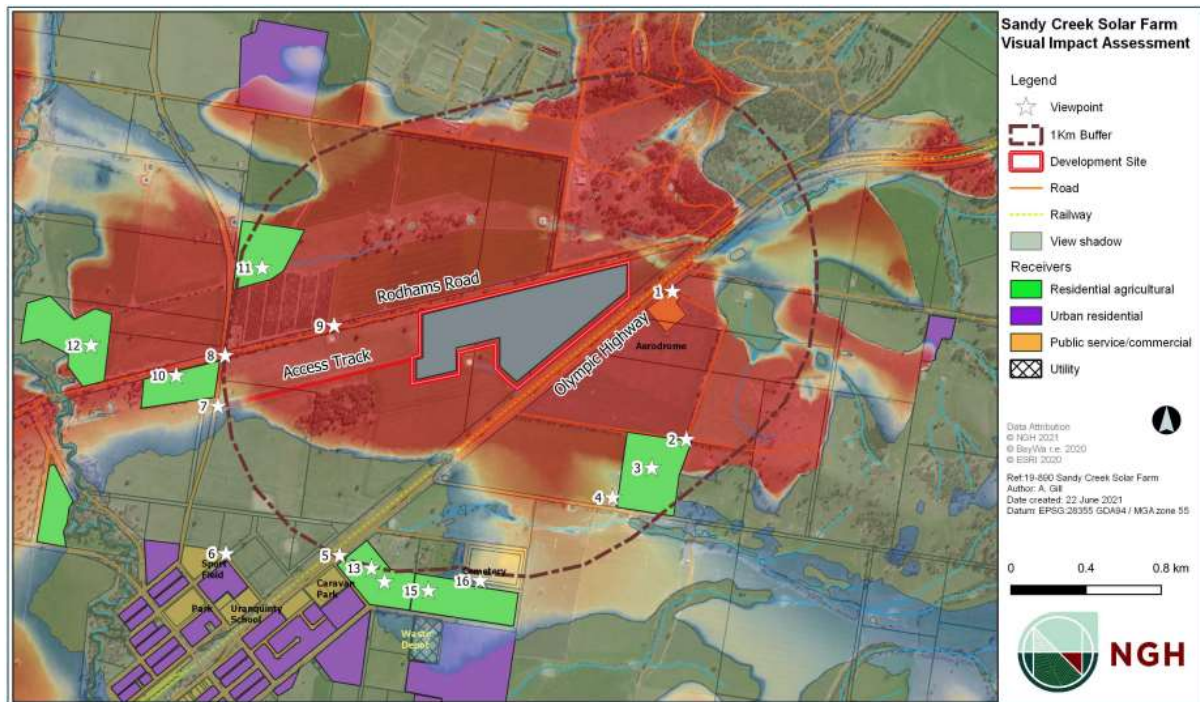


Figure 8 - VIA Viewpoints

As set out in the SEE:

Four LCUs were identified within Uranquinty and surrounding areas:

- Rural (including agricultural lands and rural dwellings).
- Residential (urban dwellings).
- Industrial (Olympic Highway, major roads, electrical and other built infrastructure, aerodrome).
- Commercial (businesses, village centre).

The scenic quality was rated in each LCU as follows:

- A high scenic quality rating describes areas with outstanding, unusual, or diverse features.
- A moderate scenic quality rating applies to areas with the features and variety normally present in the character type.
- A low scenic quality rating is given to areas lacking pleasant features and variety.

The scenic qualities for each LCU were assessed in the VIA as follows:

Rural LCU – Scenic quality is considered moderate. Built elements are production-related and include linear fences, powerlines, roads, agricultural buildings, and rural homes. Forms are typically uniform, of undulating elevation and linear. This LCU is common and the dominant LCU in the study area. The proposed solar farm is located within this LCU.

Residential LCU – Scenic quality is considered moderate with views from residences varying in colour and form. Larger lot residential homes are heavily screened by mature vegetation plantings while views from urban residences are dominated by views of other houses, fences, and local roads in close proximity to their living space. Built elements include closed and open linear fences, powerlines, roads, patches of remnant and planted vegetation with limited vistas of surrounding agricultural land. This LCU is common in the study area.



Industrial LCU – *Scenic quality is considered low, with features matching the land use. Some screening is present along Olympic Highway and surrounding residences, providing broken views of surrounding rural land visible through existing vegetation. This LCU is common in the study area, with the development site located approximately 80m north of Olympic Highway.*

Commercial LCU – *Scenic quality from the aerodrome is considered moderate, given the elevation and the nature of the business. The development site is clearly visible from the aerodrome, though views, glint and glare are not likely to impact aeroclub activities.*

The assessment of the viewpoints identified in the figure above is summarised in the SEE as follows:

ID	LCU	Distance to site	Scenic quality	Sensitivity
1	Industrial	Foreground	Low	Low
2	Rural/Industrial	Foreground	Moderate	Moderate
3	Rural	Foreground	High	Moderate
4	Rural	Foreground	High	Moderate
5	Industrial	Middle ground	Low	Low
6	Residential	Middle ground	Moderate	High
7	Rural	Middle ground	Moderate	Moderate
8	Rural	Foreground	High	Moderate
9	Rural	Foreground	High	Low
10	Rural	Middle ground	Moderate	Moderate
11	Rural	Foreground	Moderate	Moderate
12	Rural	Middle ground	Moderate	Moderate
13	Rural	Foreground	Moderate	Moderate
14	Rural	Middle ground	Moderate	Moderate
15	Rural	Middle ground	Moderate	Moderate
16	Rural	Middle ground	Moderate	Moderate

Figure 9 - VIA Assessment of Viewpoints (Unmitigated)

Visual Landscape Management Zones were then allocated to the viewpoints. The zones were derived by combining scenic quality (from the LCUs), viewer sensitivity and the distance to the proposed solar farm.

Proximity / sensitivity								
Scenic quality		Foreground High	Middle ground High	Background High	Foreground Moderate	Middle ground Moderate	Background Moderate	Foreground Low
	High	A	A	A	A	B	B	B
	Moderate	A	B	B	B	B	C	C
	Low	B	B	B	B	C	C	C
Management priority		Management objectives						
A		Maximise retention of existing visual amenity. Landscapes are least able to absorb change. Developments may lead to a major change.						
B		Maintain existing visual amenity, where possible. Protect dominant visual features. Developments may be allowed to be visually apparent.						
C		Less importance for retaining existing visual amenity. Landscapes are able to absorb change. Developments may be allowed to dominate but should reflect existing forms and colours where possible.						

Figure 10 – Visual Landscape Management Zone (LMZ) Decision Matrix and Objectives

Finally, evaluation criteria are used, assessing the degree of contrast produced by the solar farm at each viewpoint. This is set out in the SEE as follows:

- *High contrast: the proposal would be dominant within the landscape and generally not overlooked by the observer; the visual change would not be absorbed.*
- *Medium contrast: the proposed activity would be moderately dominant and noticed; the visual change would be partially absorbed.*
- *Low contrast: the proposed activity would be seen but would not attract attention; the visual change would be well absorbed.*
- *Indistinct: contrast would not be seen or would not attract attention; the visual change would be imperceptible.*

*To determine if the objectives for the VLM zone are met, the contrast rating for the viewpoint is compared with the relevant management objectives to give a visual impact level. The visual impact level is consequently defined as:*

- *High impact: contrast is greater than what is acceptable.*
- *Medium impact: contrast is acceptable.*
- *Low impact: visual contrast is little or not perceived and is acceptable.*

*For high impact viewpoints, mitigation must be considered.*

The VIA assessed the impacts of the development from various viewpoints. Dwellings represented by viewpoints 3-4 and 13-16 were assessed as having moderate inherent potential visual impact without mitigation measures. Views were assessed as being minimised by distance, medium/medium-low contrast, existing vegetation and topography. No high potential visual impacts were identified.

Under the BLM assessment method, mitigation is not required for moderate impacts. Notwithstanding, the development does propose buffer screening which would potentially reduce these impacts. Under the BLM method, visual impacts are deemed acceptable.

No mitigation was identified as being required from viewpoints 7, 8, and 9, being low use roads, level with the site and with moving vehicles, reducing both sensitivity and time. Residences represented by viewpoints 6, 10, 11 and 12 are considered to be heavily screened from the site by existing features such as vegetation.

#### *Visual Impacts - Generally*

The BLM method used in the SEE provides a technical analysis for assessing visual impacts. Taking a more rudimentary approach, however, it is considered that the visual impacts of the development are acceptable. The development will be visible from a range of locations. From the Olympic Highway and the railway line, views will be fleeting, as the site is passed at speed. For most dwellings in proximity to the site, views are already heavily screened, with the site distant to the dwelling. Other locations are level with the site therefore heavily restricting views.

The dwellings that appear most likely to be impacted by the proposed dwelling are on the south-eastern side of the site on the opposite side of the Olympic Highway. A cluster of three dwellings are located on this property, and they are located up to 30-40m higher in the landscape than the development site.

The VIA specifically addressed two of the dwellings, and concluded that existing vegetation would provide considerable screening from these dwellings. Photographic evidence submitted supports this position. For the dwelling not specifically assessed it is considered that vegetation on the site would provide reasonable screening of the development site, noting that this dwelling is over 1km from the site, meaning the solar farm represents an increasingly diminishing component of the overall view from this property.

Overall, whilst the solar farm will likely be partially visible from some dwellings, it is considered that it is screened sufficiently to ensure that it is not unreasonably prominent. Furthermore, whilst visual impacts should be minimised where possible, on their own, they do not cause a significant adverse impact on adjoining properties, particularly where there is a degree of separation between the development and receiver. It is considered that it would be unreasonable to constrain development of adjoining land simply on the basis that the development can be sighted, particularly when the development of any rural location for the purpose of a solar farm would likely result in some visual impacts.

#### *Glint and Glare Impacts*

A glint and glare assessment was carried out for the development. An independent peer review was then carried out of this assessment.

The glint and glare assessment considered impacts on dwellings, the railway line/train drivers, surrounding roads (including the highway) and the model aerodrome. The assessment concluded the following:

- Solar reflections (i.e. glint and glare) are geometrically possible towards 21 of the 32 receptors assessed along the Olympic Highway. For receptors 12-14 reflections occur outside the primary field of view and there is partial screening by the railway embankment. For receptors 15-25 reflecting panels may be possible within a road user's primary field of view when travelling south-west (i.e. towards Uranquinty). The impact was assessed as moderate. For receptors 12-25 proposed screening, once established, the assessment determines views of the panels will be screened and there will be no impact. For receptors 26-32 solar reflections are not expected in practice as the panels will be screened by the railway embankment and existing vegetation, with proposed screening providing further relief.
- Solar reflections are geometrically possible towards 16 of the 21 assessed receptors along the railway line. For receptors 6-8 views of reflecting panels may be possible however they occur outside the train driver's primary field of view. For receptors 9-19 views of reflecting panels are also assessed. In this case the impact is assessed as moderate. For receptors 6-19 the proposed tree plantings have been assessed as being sufficient to ensure no impact. For receptors 20 and 21 solar reflections are not predicted in practice as existing terrain and vegetation is assessed as significantly screening the site.
- Dwellings were not assessed as assessment determined that dwellings within 1km of the development were suitably screened. This conclusion is considered to be supported by the VIA. It is noted that the 1km radius is consistent with the Victorian Department of Environment, Land, Water and Planning guidelines for the design and development of solar energy facilities. These guidelines are considered the most relevant guidelines in place for the development.

The assessment concluded that the height of screening will need to be managed to ensure that reflecting panels are sufficiently obstructed. The height necessary will depend on the

relative elevation of the receptors. It is therefore recommended that a condition of consent be imposed requiring that the landscape plan be accompanied by a detailed analysis by a suitably qualified person to certify that proposed plantings are of an appropriate height to screen the panels from the road and rail receptors identified as requiring screening above.

The assessment raises the question of how impacts would be managed during vegetation establishment. It was established that the resting angle in the assessment above was carried out at 0 degrees which represents a worst-case scenario. Changing the resting angle to 5 degrees eliminates all possible glare towards the assessed road and railway sections. It is recommended that a condition of consent be imposed requiring that until such time that vegetation screening is adequately established, that the resting angle of the panel be not less than 5 degrees. The condition should require that prior to any reduction in the resting angle, a further assessment shall be carried out, demonstrating that the vegetative screening is sufficient to ensure glint and glare impacts will not impact on the Olympic Highway, or the Main Southern Railway, or its users. The condition should require that the report be to the satisfaction of Council, ARTC and TfNSW.

In addition to the above, an additional glint and glare assessment was carried out to assess impacts on the Wagga Model Aero Club site and local roads within 1km of the site. This additional assessment assumed a resting angle of 0 degrees and concluded the following:

- Solar reflections are geometrically possible on a number of local roads. A number of the roads identified are in fact internal roads within Defence land or private driveways servicing properties. Public roads for which impacts are geometrically possible are Rodhams Rd (route 6) and Dunns Rd (route 5). For Dunns Road, maximum daily glare duration is 19 minutes. Existing vegetation and intervening terrain will significantly filter views. Buffer planting will significantly screen reflections once established and no mitigation was recommended. Rodhams Rd would experience up to 45 minutes of glare. Existing vegetation would provide some screening. Given that the road is an extremely low use track, no mitigation was recommended. The assessment determined that the impact under the Victorian Guidelines was “low” for Dunns Rd and “moderate” for Rodhams Rd.
- Solar reflections are geometrically possible for the Wagga Aero Club Site. The maximum daily duration is assessed to be 4 minutes, and only possible during the evening when the Sun is low in the sky. Therefore an observer will likely have a view of the Sun within the same viewpoint of the reflecting solar panels. The Sun is a far more significant source of light. Buffer plantings are anticipated to significantly screen the site once established.

Following these conclusions, it is recommended that the condition regarding resting angles foreshadowed above be extended to incorporate Dunns Rd for the future assessment prior to reverting to 0 degrees.

The peer review of the assessment made a range of notes regarding the assessment. These generally were not significant and primarily focused on the possibility of limiting the backtracking operation to minimise glint and glare impacts. It was noted that the review of impacts on highway users was not assessed for truck drivers with a greater eye level. The peer review also noted that the value of vegetation screens for potential dwelling receptors was not assessed as modelling for dwellings was not undertaken.

Overall, the peer review put forward the following considerations for the assessment process:



- *Limitations on the backtracking operation of the solar farm can be managed through the Project CMP and EMP. A restriction on the resting angle of the PV panels to a minimum of 5 degrees during daylight hours could be implemented to reduce the geometric possibility of glare impacting the railway line, highway, local roads, and model airfield. This restriction could be reduced/removed at such time that the proponent can demonstrate the vegetation screening surrounding the Project is of sufficient maturity to block glare to surrounding sensitive receptors.*
- *The Project Landscape Plan is to include vegetation screens, it is recommended these screens should be at minimum 5 metres wide and include a variety of plant species to provide a dense screen sufficient to block glare, to a minimum height of 4 metres. The vegetation screens should extend the full length of the eastern, southern, and western boundaries of the solar farm.*
- *It is recommended the Project Environmental Management Plan includes a process for managing complaints and provides a rectification procedure that may include further adjustment to the backtracking operation and/or screening where appropriate.*

The limitation on backtracking is discussed above and is recommended. Noting the comments about vegetative screening for dwellings made in the peer review, a further assessment of glint and glare impacts on these dwellings could be carried out as part of the review required to adjust backtracking angles, prior to the angles being adjusted. The remaining matters for consideration are recommended to be conditioned, noting that the third point leaves scope for ongoing adjustments to manage impacts in future should they arise.

It is considered, subject to the conditions of consent recommended, that the glint and glare impacts of the proposed development are acceptable.

### **Access, transport and traffic**

Operationally, the development will result in very minimal extra traffic movements, with staff only visiting the site on an as needs basis. Therefore minimal impacts are anticipated.

During construction there is anticipated to be an increase in traffic.

A Traffic Impact Assessment was prepared for the development. The TIA identified that during peak construction, an average of 46 vehicles movements a day would be associated with the site, being 40 light vehicle movements and 6 heavy vehicles. This peak is not for the duration of the 9 month construction, with the peak during months 3 to 6 (inclusive). Outside of these months, this reduces to an average 2-3 heavy vehicles movements a day, and between 16 and 32 light vehicle movements a day.

Overall, this is considered to result in negligible impact on the road network, and for residents living along the route, given the relatively small number of vehicle movements and the finite time frame within which the impacts will exist.

The TIA recommended a "Construction Traffic Management Plan be prepared for the gravel section of Churches Plain Road (750m) from the end of the seal at Baker Street and the Solar Farm Access Gate to ensure the gravel pavement is maintained to accommodate construction traffic and other road users". It is recommended that conditions to this end be incorporated into any consent.

The development was referred to TfNSW who advised that “the intersection of the local road network (Yarragundry Street) with the classified road network (Olympic Highway) along the submitted transport route...is considered to be to an adequate standard and will not require any upgrade as a result of this development”. TfNSW raised no objection to the proposed development subject to the imposition of conditions requiring the submission of a Traffic Management Plan, and clarifying that the development shall be at no cost to TfNSW.

As discussed in detail in part (a)(iii) there is potential for damage to roads and verges as a result of the vehicles associated with the construction of the development. Conditions have been recommended in this regard.

Proposed access to the site is considered acceptable.

### **Services**

The proposed development will connect to the electricity grid. Further works under Part 5 of the Environmental Planning and Assessment Act 1979 are proposed to achieve this.

### **Heritage**

There are no items of environmental heritage associated with post European settlement of the land.

An Aboriginal Cultural Heritage Assessment identified 16 stone artefacts sites, including 13 within the development site. These sites include one artefact scatter (Sandy Creek SF AFT 2) and 12 isolated artefacts (Sandy Creek SF AFT 4, 5, 7, 8, 9, 10, 11, 12, 13, 14, 15 and 16). Two scarred trees (Sandy Creek SF ST 1 and 2) lie within the subject land but outside of the proposed development site and would not be impacted.

The development will result in a direct impact on the 13 sites identified in the development site during earthworks, which could result in the removal, breakage or displacement of artefacts. The ACH considered that while these impacts would occur, that there are likely to be a number of similar sites in the local area and therefore the impact to the overall local archaeological record is considered to be low.

The ACH made a number of recommendations for the proposed development, including provision of buffers around the scarred trees, salvaging of artefacts prior to the commencement of works, and relocation of the artefacts consistent with Requirement 26 of the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales*. Where appropriate/necessary it is recommended that these be conditioned.

To carry out the works an Aboriginal Heritage Impact Permit (AHIP) is required under s90 of the *National Parks and Wildlife Act*. An AHIP is issued by Heritage NSW and has been applied for under this Development Application, making the development Integrated Development.

Heritage NSW issued General Terms of Approval (GTAs) for an AHIP. These GTAs must be included in any consent. It is noted that the GTAs appear similar to an additional information request, however Heritage NSW has confirmed that these do indeed constitute the GTAs.

### **Natural Hazards**

Parts of the site are mapped as being within the flood planning area. Further minor overland flooding is identified on parts of the site. This area only coincides with the development site at the site access area. The flooding is minor (approximately 100-200mm) and is not considered to result in unreasonable impacts.

Bushfire has been considered under part(a)(iii) of this assessment report.

Natural hazard impacts are considered acceptable.

#### **Human-Made Hazards**

Potential contamination on the site from previous activities is discussed in detail in the SEPP 55 assessment in part(a)(i) of this assessment report.

#### **Economic Impact in the Locality**

The proposed development is considered to generally result in a positive economic impact in the locality. The development will result in employment generation, both during construction, as well as on an ongoing basis. The development is predicted to employ 40 staff during construction and one full time equivalent during operation.

Where non-local staff are employed, this is predicted to also result in positive economic impacts, with employees staying and spending money in the local area during works.

#### **Social Impact in the Locality**

Social impacts of the development are linked to the perceived impacts on residential amenity, such as from impacts on views. These impacts are discussed throughout this assessment report.

#### **Other Land Resources**

The proposed development will result in limitations on the agricultural use of the land for approximately 50 years, but is not anticipated to result in permanent changes to the productivity of the land.

The site of the development is mapped as being Class 3 land on the Land and Soil Capability Mapping for NSW. According to Office of Environment and Heritage's 'The land and soil capability assessment scheme: second approximation', Class 3 land has limitations that must be managed to prevent soil and land degradation, however these can be readily overcome by widely available and readily implemented land management practices. Class 3 land is especially widespread on the NSW slopes and is capable of sustaining cultivation on a rotational basis, however productivity will vary with soil fertility and there are greater restrictions on use than for Class 1 or 2 lands due to increased limitations.

The site is currently being used for cropping and grazing and whilst the development will not encourage sustainable primary industry production on the site, the development will not impact significantly on the natural resource base or the existing agricultural potential of the site. There is scope for grazing to continue on the land and across parts of the subject site that are not developed for the solar farm. Upon decommissioning of the development, agricultural activities will be able to continue, with pre-development potential retained.

The Department of Primary Industries has released the draft State Significant Agricultural Land (SSAL) map. The draft map is currently on exhibition until 24<sup>th</sup> December 2021. The map was created in response to a report prepared by the NSW Agriculture Commissioner on *Improving the Prospects for Agriculture and Regional Australia in the NSW Planning System* on 31 October 2021. The report contained a number of recommendations, including the development of a statutory State Significant Agricultural Land Use Planning Policy and the creation of the SSAL Map to inform the statutory policy.

The site is identified on the draft SSAL Map as 'State Significant Agricultural Land' as highlighted below:



Figure 11 - Draft State Significant Agricultural Land Map (on exhibition)

The NSW DPI exhibition website (<https://nswdpi.mysocialpinpoint.com/ssal>) advises that the mapping is at “an **early draft stage**” (emphasis added by DPI). The DPI also notes that:

*The preliminary draft SSAL map is derived from existing statewide information where the most relevant characteristics related to the best agricultural lands are used. The layers used to build this map are the best available in NSW, however these input layers are of variable quality. There will be also be [sic] real and perceived anomalies because of the factors used (such as slope, salinity, etc), some of which may not be evident in land values or other readily observable characteristics.*

*Due to the data limitations it's important to start this process and do so with public exposure and assistance. This will lead to improvements in this mapping and its value for decision makers over time as the data base is improved.*

*You may notice that some localities or regions have more accurate mapping than others, this again is due to the underlying data layers. In those areas where data is less accurate, we encourage feedback to inform the next version of the map.*

The DPIs *State Significant Agricultural Land Mapping Data Summary Statement* provides further guidance on the draft SSAL map data, including:

- *The draft map has been produced using only biophysical criteria to identify a static resource which will not change based on socio-economic or other changeable datasets.*
- *Although the overall confidence of the soil mapping informing the Land and Soil Capability mapping and the Inherent Soil Fertility mapping was identified as 'low' to 'very low' within some areas of the state, the mapping coverage of the Hunter, Central and Lower North Coast region was identified as having 'good' to 'fair' confidence.*



- *The input data limits the accuracy of this map at a property scale. Care should be taken when applying the results at an individual property level.*

Therefore it is clear that the DPI considers that the data presented in the SSAL is very preliminary and of not great veracity, particularly at an individual property level. As such, and given that the map is still on exhibition, only little weight should be given to the presence of the site being identified as State Significant Agricultural Land.

Even taking into account the mapping, the implications of being mapped as such is unclear, with the statutory framework not yet identified. The map is not a draft epi, and therefore does not carry the assessment weighting of even an early draft epi.

Notwithstanding, the *Improving the Prospects for Agriculture and Regional Australia in the NSW Planning System* report (attachment 3) provides some guidance on what the statutory framework could look like:

*The SSALUP Policy should:*

- *apply to land mapped as SSAL;*
- *guide planning authorities on how to plan for agriculture in strategic planning where it is identified as a priority land use;*
- *set NSW Government expectations about what considerations will be used in making decisions affecting this land, where this land has been identified as a priority;*
- *be sufficiently flexible to also be applied by councils seeking to prioritise agriculture in their local government area on non-SSAL land.*

*The SSALUP Policy will not:*

- *seek to ban any land uses, but rather apply a greater level of consideration to nonagricultural land uses on SSAL;*
- *alter the permissibility of developments permitted under an environmental planning instrument, as mining is permitted under the Mining SEPP;*
- *replace environmental impact assessment requirements in the Environmental Planning and Assessment Act 1979.*

*An SSALUP Policy could require that:*

*When undertaking strategic planning or considering a planning proposal that interacts with the SSAL map, a planning decision-maker should consider the following:*

- *The role of agriculture in regional economic growth and local amenity where SSAL is present;*
- *Any conversion of agricultural land to a non-agricultural use should be in accordance with the relevant Regional Plans, Local Strategic Planning Statements, and local land use strategy. Planning proposals should always be consistent with the strategic policy framework;*
- *Non-agricultural land uses on, and surrounding SSAL, should be planned and approved in a way that minimises the impact on agriculture and the potential for future land use conflict;*

Therefore, it is clear that even if the mapping is accurate, any statutory instrument would not alter the permissibility of solar farms on the site. Rather it is likely that certain additional considerations would apply to the development.



Overall, whilst it is noted that the site appears on the draft SSAL map, this is of only minor determinative weighting in considering the Development Application.

### **Pollution and off-site environmental effects**

The development is considered unlikely to result in significant pollution or off-site environmental effects. Standard conditions of consent are recommended to manage erosion and sedimentation. Assessments submitted with the Development Application have demonstrated that post-development flows will meet pre-development flows.

There is potential for dust impacts, particularly on Churches Plain Rd during construction. It is noted that any impacts would already exist as a result of vehicles using this public road, with impacts to only increase in regularity due to additional traffic. Overall this impact is assessed as acceptable.

### **Flora and fauna**

Impacts on flora and fauna are discussed in part (a)(i) of this assessment report and are considered acceptable.

### **Noise and Vibration**

#### Noise

An acoustic assessment was carried out as part of the Statement of Environmental Effects.

A range of residential receivers were identified within 1km of the development site, including 9 rural dwellings and 38 dwellings in the village of Uranquinty.

In addition a range of non-residential receivers were identified including the Uranquinty Public School, the Uranquinty sportsground/playground, the Army Recruit Training Centre.

The assessment concluded that construction noise from the proposed development would impact on sensitive receivers within 360m of the development site. The only receiver within this distance is the associated receiver on the subject land. Other receivers are a minimum 800m from the site and are unlikely to be impacted, as they would be exposed to noise levels below 55 dB(A).

The acoustic assessment notes that pile driving, which would be the noisiest component of construction, would not be continuous for the 9-month construction period.

The SEE notes that a Construction Noise and Vibration Management Plan (CNVMP) would be developed for the site. The CNVMP would provide mitigation measures for potential sensitive receivers. Sensitive receivers would be notified of the construction activities that would likely be audible. It is recommended that this be conditioned.

During operation the SEE noted that the only source of noise from the panels is the tracking motors, which would occur for several seconds every 20-30 minutes. Minimal additional noise (typically 2dB(A)) would be produced from the trackers. This would result with levels below the project amenity and intrusive noise levels identified in the SEE. The four power stations to be installed have an indicative noise level of 42dB(A) at 200 metres. As such, sensitive receivers at over 800m are unlikely to be impacted.

The SEE recommends the development of a noise management procedure to manage operational noise complaints. It is recommended that this form part of the OEMP.

Road traffic noise was also assessed in accordance with the NSW Road Noise Policy. The SEE concluded that noise was unlikely to exceed the project road traffic noise criteria.

#### Vibration

An assessment of vibration impacts was carried out in the SEE in accordance with the *NSW Department of Environment and Conservation Assessing Vibration: a technical guideline* and the RMS's *Construction Noise and Vibration Guideline (CNVG)*. Minimum distances for cosmetic damage and human response are comfortably met.

#### **Energy Impacts**

The proposed development is considered to have significantly positive energy impacts, by increasing the production of renewable energy.

#### **Site Design and internal design**

The design of the site is considered acceptable. Conditions of consent have been recommended with regard to landscaping.

#### **Construction**

Construction impacts have been assessed throughout the report in the relevant sections. A construction management plan is recommended to be required as a condition of consent.

#### **Cumulative Impacts**

The development is within a locality not currently occupied by similar development. The main impacts associated with the development are visual and glint and glare. Cumulative impacts in this regard would generally require the infrastructure to be in the same visual catchments.

#### **The Principles of Ecologically Sustainable Development**

##### *The Precautionary Principle*

The Precautionary Principle requires that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. Threats of serious or irreversible environmental damage have not been identified.

##### *Inter-generational Equity*

Reduction of reliance on fossil fuels is essential in ensuring intergeneration equality. The proposed development directly assists in this.

##### *Conservation of Biological Diversity and Ecological Integrity*

As demonstrated by this report, impacts on biodiversity are not considered to be significant.

##### *Improved Valuation, Pricing and Incentive Mechanisms*

The nature of the development is such that it provides increased renewable electricity to the electricity grid. This is important in ensuring that the costs of carbon emissions are appropriately set.

The development is considered consistent with the principles of ESD.

#### **(c) – The suitability of the site for the development**

The land is appropriately zoned for the land use that is permissible under the provisions of SEPP Infrastructure and the Wagga Wagga LEP. The proposed land use does differ to the historical use of the land for agricultural purposes but is one that can be suitably located and managed on this land with an acceptable degree of impact.

The site has been selected as a site for a solar farm due to its predominantly cleared nature, clear of higher slopes, within close proximity to existing electricity infrastructure and which is also easily accessible. The character of farmland throughout the country is transitioning to include solar energy production as an alternative to traditional agricultural production where suitable infrastructure and locations exist, in order to support additional renewable energy sources and provide alternative sources of rural income.

The site is of a sufficient size to accommodate the use and is located away from densely populated areas. There are no site constraints that would render the site unsuitable for the proposed development.

#### **(d) - any submissions made in accordance with this Act or the Regulations**

##### **Referrals**

The Development Application was referred externally to Transport for NSW, Transgrid, Essential Energy, the Natural Resource Access Regulator, Australian Rail Track Authority, Local Land Service, Heritage NSW and the Department of Defence.

##### **Notification and Advertising**

The application was placed on public exhibition from 5<sup>th</sup> November 2021 to 19<sup>th</sup> November 2021 in accordance with the provisions of the WWDCP 2010.

##### **Public Submissions and those from public authorities**

27 public submissions were received, all of which were unique. 11 of the submissions received were identified as being local to the vicinity of the development, being located in the village of Uranquinty, or nearby rural properties.

Submissions were received from Essential Energy, the Natural Resource Access Regulator, Transport for NSW, Local Land Service and Heritage NSW during the course of the Development Application.

##### Submissions from public authorities

###### Essential Energy

The Essential Energy submission is discussed in part(a)(i) of the assessment report.

###### Natural Resource Access Regulator

NRAR advised that for the purposes of the Water Management Act 2000 a controlled activity approval is not required for the development.

###### Local Land Services

LLS advised that they had no objection to the proposed development.

###### Transport for NSW

TfNSW comments are discussed in part (a)(i) of the assessment report.

###### Heritage NSW

Heritage NSW provided GTAs for an AHIP. This is discussed in part (b) of the assessment report.

##### Public submissions

27 public submissions were received, all of which were unique. 11 of the submissions received were identified as being local to the vicinity of the development, being located in the village of Uranquinty, or nearby rural properties.

Due to the volume of submissions, each submission cannot be addressed individually in this assessment report. All, however, have been considered in full and have informed the overall development assessment in this report. Issues and key points raised in submissions are addressed below:

*Development proposed on agricultural land / prime agricultural land*

Almost all submissions raised concerns about the proposed development being located on agricultural land or prime agricultural land. The matters raised can be summarised as follows:

- Loss of agricultural land / prime agricultural land
- Land needs to be preserved for food production
- Minimal suitable land for farming in Australia and this removes more
- Land is on the draft State Significant Land Map
- 'Important Agricultural Land Mapping' being carried out by DPI needs to be made available.

Impacts on agricultural land are assessed in part (a)(i) and (b) of this assessment report. In this assessment it is noted that the land will still be able to be used for some agricultural purposes, and the long-term productive value of the land will not be lost, with the site able to return to agriculture following decommissioning. In this sense the land is not "lost", but being used for other permissible purposes. The land itself only represents a very small proportion of land and productive land in Australia, and cumulatively, solar farms still only account for a very small proportion of land use in rural areas.

Comments regarding the draft state significant land map are included in part (b) of the assessment report. Regarding the 'Important Agricultural Land Mapping' being carried out by the DPI, this project has been paused and superseded by the state significant land map project.

*Uncertainty about decommissioning*

Issues raised can be summarised as follows:

- Who will be responsible
- Companies not required to pay bond
- Risk land owners will be left with infrastructure
- Ratepayers left to pay cleanup bill
- Waste created from panels

The development proposes a condition requiring the preparation of a decommissioning plan prior to decommissioning. Such a condition is recommended to be imposed, however, timing should ensure that an initial plan is developed prior to operation of the site. Panels will be removed at decommissioning and will need to be disposed of or recycled at an appropriate facility.

The cost of decommissioning is subject to agreement between the property owner and the developer. There is no clear reason why ratepayers would be required to decommission the site. Conditions of consent requiring decommissioning of the facility are enforceable on both the landowner and the operator of the development. A bond is not necessary as Council would not incur decommissioning costs.

*Traffic impacts during construction*

Issues raised can be summarised as follows:

- Road network (Baker St, Churches Plain Rd, etc) not suitable for proposed traffic generation
- Dust already an issue / Churches Plain Rd needs to be sealed
- Damage to local roads
- Maintenance issues on Churches Plain Rd
- Increased traffic on local roads
- Noise and vibration impacts resulting from traffic
- Alternative route via Sturt Highway and Churches Plain Rd suggested

As outlined in part (a)(i), (a)(iii) and (b) of this assessment report, traffic impacts, including volumes, noise and dust, are considered acceptable, given the relatively small daily volumes expected, and the limited period of time in which impacts will be experienced. Roads are considered generally suitable for the temporary construction traffic. As such, alternate routes are not considered necessary.

Conditions of consent have been recommended to manage potential damage to roads and to ensure that the developer makes good any damage caused.

The TIA recommended a "Construction Traffic Management Plan be prepared for the gravel section of Churches Plain Road (750m) from the end of the seal at Baker Street and the Solar Farm Access Gate to ensure the gravel pavement is maintained to accommodate construction traffic and other road users". It is recommended that conditions to this end be incorporated into any consent.

#### Visual Impacts

Issues raised include:

- Impact on landscape
- VIA insufficient
- Mitigation insufficient
- Fencing is out of character
- Screening not high enough to provide barrier to property to east
- Impacts on farming lands on property to the east not assessed.
- VIA assessment incorrectly identifies a dwelling on land to the east / errors or inconsistencies in VIA.

Visual impacts are discussed in detail in part (b) of this assessment report. The VIA is considered sufficient. Fencing to the north, east and south is proposed behind buffer plantings, whilst to the west fencing addresses a low use road.

Screening is not intended to entirely screen the development from all locations. For the property to the east, any increase in screening height or width is unlikely to increase the screening of the solar farm substantially, due to the elevation involved. The VIA notes that the dwellings on this property are well screened by existing vegetation in the locality.

It is not considered reasonable to require the development to provide screening from farming lands, or to consider the views from these locations given the nature of the use of these lands. It is considered appropriate that the VIA focussed on the dwellings on adjoining lands.

Regarding the asserted errors in the VIA, the map (included as Figure 8 in this assessment report) does imprecisely map viewpoint 4 if it was intended to be at the south-westernmost



dwelling on this property, however the accompanying photo and description of viewpoint 4 in the SEE states that the viewpoint is from a private rural dwelling which appears to accord with the relevant dwelling being assessed. An extract is provided below.

VIEWPOINT 4		
Summary of Viewpoint		Viewpoint Description / Impact
LCU	Rural	<p>Taken from a private rural dwelling facing north-west at an elevated position overlooking the development. Dominant features include agricultural land currently used for cropping with remnant roadside vegetation in the background. Industrial views of Olympic Highway and the Kapooka Defence Force base are also visible. Proposed infrastructure would be visible from this elevated position but would not dominate the landscape and blend in with other existing build features. Due to the elevated position, the proposed additional planted screening may not be effective in further obscuring views from this location.</p> <p><b>No mitigation required, therefore the residual impact remains the same as the inherent visual impact.</b></p> 
Scenic quality	Moderate	
Proximity	Foreground (<1 km)	
Sensitivity	Moderate	
LMZ Objective	B	
Contrast	Medium	
Inherent visual impact	MODERATE	
Residual visual impact	MODERATE	

Figure 12 - Viewpoint 4 from Statement of Environmental Effects

Notwithstanding, given that any screening for this viewpoint is predominantly provided by the east-west driveway plantings on the right of the image, any assessment taken from a point further south would likely indicate greater rather than lesser impacts.

Another error is noted in the submissions, whereby the summary table (Figure 9 in this assessment report) notes that viewpoint 4 has high scenic quality, whereas the assessment above (figure 12) notes that it is moderate. In this case it is logical to rely on the detailed assessment, which is also consistent with the Landscape Character Units assessed in the VIA (which notes the Rural LCU scenic quality is considered moderate). Notwithstanding, it is considered visual impacts on this dwelling are acceptable.

#### Glint and Glare

Glint and glare impacts are discussed in detail in part (b) of this assessment report with detailed conditions recommended to mitigate impacts. Discussion regarding dwellings is also discussed in this section.

Submissions request an increase in the size of the buffer plantings. Conditions of consent recommended require that buffer plantings are designed to ensure glint and glare is appropriately mitigated.

#### Impacts on Flora and Fauna

Impacts on flora and fauna are assessed throughout this assessment report and are considered acceptable.

#### Noise impacts

Issues related to construction and operational noise. As set out in part (b) of this assessment report, noise impacts during both phases is expected to be acceptable.

Pollution during construction

Conditions of consent regarding waste collection and disposal as well as sediment and erosion control are recommended. Pollution during construction is not anticipated.

Fire risk

The development has been assessed in accordance with PBP 2019. Appropriate measures are proposed to manage fire risk.

Weed control

The OEMP will be required to include provisions relating to weed control.

Toxicity of Solar Panels / contamination of land from solar panels

The site will be decommissioned at the end of the project life that is estimated to be 50 years. At this time the panels will be removed from site and the land returned to agricultural use. There is no anticipated contamination risk from the panels.

Loss of tourism with accommodation taken by workers

Only 40 workers are proposed to be employed during construction. It is unlikely this will have any appreciable impact on the LGA's accommodation supply.

Increased greenhouse gas emissions from production of panels

Whilst global energy supply relies on fossil fuels, greenhouse gases will be produced from the production of solar panels. As energy sources transfer to renewables, this renewable power will be used in panel production. Production using carbon emitting fuels is an unavoidable step in the transition to renewables.

Impacts on property values

Impacts on property values themselves are not a relevant planning consideration. Potential impacts that could lead to them have been assessed under each relevant impact.

Potential land use conflicts

No significant land use conflicts have been identified.

Sets a precedent for other non-agricultural uses / concern the area will become industrial

Any future Development Application would be assessed on its individual merits. Most industrial uses are not permitted in the zone. There are no strategic planning documents identifying this area as a future industrial area.

Impacts on the growth of the village / conditions need to be imposed on how close the solar farm can go to the village / not consistent with possible future development that may extend along Dunns Rd

The development is set a considerable distance from Uranquinty and is considered unlikely to impact on the future growth of the village. Urban development from the southern end of Wagga Wagga is not foreshadowed in this area. There is no need to condition how close the solar farm can be in relation to Uranquinty as any future development would require further Development Consent.

Inadequate consultation by the developer

There is no requirement for consultation to be carried out by the developer.

*Potential for impact on Defence satellite communication dishes*

The Development Application was referred to the Department of Defence who made no submission. It is reasonable to expect that if there was an impact on these structures that a submission would have been made.

*Use of water for dust suppression*

No concerns are raised with the use of water for dust suppression.

*Loss of local jobs servicing farming operations*

It is considered that the proposed development will not have a significant impact in this regard, occupying only a small percentage of the total farmland in the district.

*Heat island effect*

Studies referenced in the SEE have demonstrated that any increases in temperature around the solar panel are minor and highly localised, and not detectable at a distance of 30m from the solar array.

*Loss of infiltration*

The stormwater assessment did not identify any substantial increase in runoff as a result of the development.

*Other matters*

A range of other submissions touched on the ownership of the solar farm, supply chains in the manufacture of solar farms, increased global mining, the need for nuclear energy, that output of solar farms is often less than predicted, increases in electricity bills and the like. These are not considered to be relevant planning considerations.

**(e) - the public interest**

The public interest is best served by the consistent application of the requirements of the relevant planning controls and by Council ensuring that any adverse effects on the surrounding area and the environment are avoided.

The proposed development contributes to federal, state and local goals of promoting the development of renewable energy and reduces the reliance on other forms of electricity generation that are reliant on the burning of fossil fuels. The proposed development is considered to be in the public interest as it offers an opportunity for productive and sustainable economic activity within the area and provides significant employment opportunities during the construction phase.

It is also in the public interest to consider the development in the context of strategic planning documents that may not be legislative but provide relevance and significance to the determination of the application. One such document is the *Riverina Murray Regional Plan 2036* that lists one of the 'Priority Growth Areas' as Renewable Energy and Mining. Under Direction 11 of this document it refers to the region's significant potential for renewable energy industries and one of the key actions is to 'promote appropriate smaller-scale renewable energy projects using bioenergy, solar, wind, small-scale hydro, geothermal or other innovative storage technologies.'

Taking into account the full range of matters for consideration under Section 4.15(1) of the Environmental Planning and Assessment 1979 (as discussed within this report) it is considered that approval of the application is in the public interest.

**Other Legislative Requirements**  
**Biodiversity Conservation Act 2016**

**Section 1.7 and Part 7 of the *Biodiversity Conservation Act 2016* (Test for determining whether proposed development or activity likely to significantly affect threatened species or ecological communities, or their habitats)**

According to clause 7.7(2) of the BC Act, if the proposed development is likely to significantly affect threatened species, the development application is to be accompanied by a biodiversity development assessment report (BDAR). In order to determine if the development is likely to significantly affect threatened species three key tests are required as follows:-

1. Is the subject site identified as an area of outstanding biodiversity value on the biodiversity values map?  
*The site is not identified on the map.*
2. Does the amount of native vegetation being removed exceed the biodiversity offsets scheme threshold.  
*The minimum lot size is 200ha, and therefore the threshold for native vegetation clearing is 1ha. Clearing is confined to Category 1-exempt land and thus the threshold would not be exceeded.*
3. Test of Significance - the test to determine whether the proposed development or activity is likely to significantly affect threatened species or ecological communities, or their habitats.  
The biodiversity assessment concluded that a significant impact to threatened species listed under the Biodiversity Conservation Act is unlikely.

**Section 733 of the Local Government Act 1993**

Section 733 of the Local Government Act 1993 provides that Councils will not incur liability for decisions or omissions concerning flood liable land or land subject to the risk of bushfire. Where required, a risk assessment has been completed and Council will be able to demonstrate that it has acted appropriately in its decision making when defending claims in liability or in circumstances where administrative decisions are challenged.

***Flooding Risk Assessment***

The development has been considered against the relevant provisions of the WWLEP2010 and DCP2010. The risk of flood to the development site is not assessed as significant as the area of land identified as flood prone is not affected by the proposed solar farm.

***Bush Fire Risk Assessment***

The development has been considered against the relevant provisions of the WWLEP2010 and DCP2010. The risks associated with the type of development necessitate the need for bush fire protection measures to be considered. The preparation of a plan will be secured by condition.

**Council Policies**

No additional Council policies apply to this development.

**Comments by Council's Officers and/or Development Assessment Team**

Council's other relevant officers have reviewed the application in accordance with Council's processing procedures.

**Development Contributions - Section 7.11/7.12 & Section 64 Local Government Act, 1993 and Section 306 Water Management Act, 2000**

s7.11/s7.12

Sections 7.11 and 7.12 of the *Environmental Planning and Assessment Act 1979* and the *Wagga Wagga Local Infrastructure Contributions Plan 2019-2034* enable Council to levy contributions, where anticipated development will or is likely to increase the demand for public facilities. As the cost of development is over \$100,000 a section 7.12 contribution of 1% of the development cost is payable. The calculation is as follows:

$$\begin{aligned} &0.01 \times \$20,850,500 \\ &= \$208,505.00 \end{aligned}$$

s64 Sewer and Stormwater

Section 64 of the *Environmental Planning and Assessment Act 1979*, Section 306 of the *Water Management Act 2000* as well as the City of Wagga Wagga's Development Servicing Plan for Stormwater 2007 and/or City of Wagga Wagga Development Servicing Plan for Sewerage 2006 enable Council to levy developer charges based on the increased demands that new development will have on sewer and/or stormwater.

s64 Sewer

No Section 64 sewer contribution is payable for this development as the development does not require connection or have any impact on Council's sewer networks.

s64 Stormwater

No Section 64 sewer contribution is payable for this development as the development is not within a stormwater DSP area. Furthermore, the development does not connect to Council stormwater infrastructure.

**Other Approvals**

The development requires an Aboriginal Heritage Impact Permit (AHIP) under s90 of the *National Parks and Wildlife Act 1974*. As such, the development was required to be referred to Heritage NSW as Integrated Development. In this regard, the Heritage NSW has issued General Terms of Approval. These GTAs must be included on any consent.

**Conclusion**

The development is considered to be satisfactory based on the foregoing assessment.

The development is considered to be consistent with all relevant environmental planning instruments, development control plans and the *Environmental Planning and Assessment Regulation 2000*. Impacts have been identified and considered and are assessed as being reasonable or manageable via the imposition of conditions of consent. Submissions have been considered in full and addressed.

The development is considered to be in the public interest as it will produce renewable energy and assist Australia in reaching net zero carbon emissions by 2050.

Heritage NSW have reviewed the application and raised no objection, providing General Terms of Approval.

All matters for consideration under Section 4.15(1) of the *Environmental Planning and Assessment Act 1979* have been considered.



## RECOMMENDATION

It is recommended that application number DA20/0558 for Electricity Generating Works (Solar Farm) be approved, subject to the following conditions:-

## CONDITIONS OF CONSENT FOR APPLICATION NO. DA20/0558

### A. SCHEDULE A – Reasons for Conditions

The conditions of this consent have been imposed for the following reasons:

- A.1 To ensure compliance with the terms of the Environmental Planning and Assessment Act 1979 and Regulation 2000.
- A.2 Having regard to Council's duties of consideration under Section 4.15 and 4.17 of the Act.
- A.3 To ensure an appropriate level of provision of amenities and services occurs within the City and to occupants of sites.
- A.4 To improve the amenity, safety and environmental quality of the locality.
- A.5 Having regard to environmental quality, the circumstances of the case and the public interest.
- A.6 Having regard to the Wagga Wagga Development Control Plan 2010.
- A.7 To help retain and enhance streetscape quality.
- A.8 Ensure compatibility with adjoining and neighbouring land uses and built form.
- A.9 To protect public interest, the environment and existing amenity of the locality.
- A.10 To minimise health risk to neighbouring residents and workers.

### B. SCHEDULE B – Deferred Commencement Conditions

N/A

### C. SCHEDULE C – Conditions

#### Approved Plans and Documentation

- C.1 The development must be carried out in accordance with the approved plans and specifications as follows.

Plan/Doc Title	Prepared by	Issue	Date
Statement of Environmental Effects (main document only - approved appendices listed and versioned below)	NGH Environmental	V1.2	25/06/21
Concept Site Layout	BayWa r.e.	4	6/1/21
Indicative Tracking System Dimensions - 1P	BayWa r.e.	1	13/11/20
Indicative Tracking System Dimensions - 2P	BayWa r.e.	1	13/11/20
MVPS20' Skidtainer	SMA	Final	9/7/19
Indicative Control Room Elevation View	BayWa r.e.	1	12/1/21

Indicative Storage Container Elevation View	BayWa r.e.	1	12/1/21
Aboriginal Cultural Heritage Assessment and Subsurface Testing Report	NGH Environmental	V1.0	6/10/20
Biodiversity Assessment	NGH Environmental	Final	26/8/20
Bushfire Assessment Report	NGH Environmental	Final	27/8/20
Noise Assessment Calculations	NGH Environmental		Undated
Traffic Impact Assessment	Peter Meredith Consulting	D	6/12/20
Hydrology Assessment Report	BayWa r.e.		Feb 2019
Preliminary Runoff Assessment	Xeros Piccolo	B	26/3/21
Solar Photovoltaic Glint and Glare Study (Rail, Highway and Dwellings)	Pager Power	2	April 2021
Solar Photovoltaic Glint and Glare Study - Addendum Consideration of Alternative Resting Angels	Pager Power	1	August 2021
Solar Photovoltaic Glint and Glare Study (Local Roads and Model Aero Club)	Pager Power	1	October 2021

The Development Application has been determined by the granting of consent subject to and as amended by the conditions of development consent specified below.

NOTE: Any modifications to the proposal shall be the subject of an application under Section 4.55 of the Environmental Planning and Assessment Act, 1979.

### **Requirements before a Construction Certificate can be issued**

- C.2 Prior to the release of any Construction Certificate, conditions C.6 – C.18 of this consent shall be satisfied.

### **Requirements before the commencement of any works**

- C.3 A CONSTRUCTION CERTIFICATE must be obtained pursuant to Section 6.7 of the Environmental Planning and Assessment Act 1979, as amended from either Council or an accredited certifying authority certifying that the proposed works are in accordance with the Building Code of Australia PRIOR to any works commencing on any ancillary buildings requiring a Construction Certificate.

NOTE 1: No building, engineering, excavation work or food premises fitout must be carried out in relation to these ancillary buildings until the necessary Construction Certificate has been obtained.

NOTE 2: YOU MUST NOT COMMENCE WORK ON THESE ANCILLARY BUILDINGS UNTIL YOU HAVE RECEIVED THE CONSTRUCTION CERTIFICATE, even if you made an application for a Construction Certificate at the same time as you lodged this Development Application.

NOTE 3: It is the responsibility of the applicant to ensure that the development complies with the provision of the Building Code of Australia in the case of building work and the applicable Council Engineering Standards in the case of subdivision works. This may entail alterations to the proposal so that it complies with these standards.

- C.4 Prior to works commencing a container must be erected on site for the enclosure of all building rubbish and debris, including that which can be wind blown. The enclosure shall be approved by Council and be retained on site at all times prior to the disposal of rubbish at a licenced Waste Management Centre.

Materials and sheds or machinery to be used in association with the construction of the building must not be stored or stacked on Council's footpath, nature strip, reserve or roadway.

NOTE 1: No building rubbish or debris must be placed, or be permitted to be placed on any adjoining public reserve, footway, road or private land.

NOTE 2: Weighbridge certificates, receipts or dockets that clearly identify where waste has been deposited must be retained. Documentation must include quantities and nature of the waste. This documentation must be provided to Council prior to application for an Occupation Certificate for the development.

NOTE 3: The suitable container for the storage of rubbish must be retained on site until operation of the development.

- C.5 Prior to the commencement of works erosion and sediment control measures are to be established and maintained to prevent silt and sediment escaping the site or producing erosion. This work must be carried out and maintained in accordance with Council's:-

- a) Development Control Plan 2010 (Section 2.6 and Appendix 2)
- b) Erosion and Sediment Control Guidelines for Building Sites; and
- c) Soils and Construction Volume 1, Managing Urban Stormwater

Prior to commencement of works, a plan illustrating these measures shall be submitted to, and approved by, Council.

NOTE: All erosion and sediment control measures must be in place prior to earthworks commencing.

- C.6 Prior to the commencement of any works, a detailed site plan and documentation, for all works, including all dimensions (including setbacks, spacing between rows) and heights of solar arrays, shall be submitted to Council, to the satisfaction of the General Manager or delegate.

- C.7 Pursuant to s7.12 of the Environmental Planning and Assessment Act 1979 and the Wagga Wagga Local Infrastructure Contributions Plan 2019-2034, a monetary contribution of \$208,505.00 must be paid to Council, prior to the commencement of any works. The monetary contribution payable under this condition will be indexed in accordance with Clause 3.2 of the Wagga Wagga Local Infrastructure Contributions

Plan 2019-2034 from the endorsed date of this Development Consent until the date of payment.

NOTE 1: Clause 3.2 of the Wagga Wagga Local Infrastructure Contributions Plan 2019-2034 provides for Section 7.12 contributions to be indexed in accordance with annual movements in the March quarter Consumer Price Index (CPI) (All Groups Index) for Sydney as published by the Australian Bureau of Statistics.

NOTE 2: The monetary contribution identified above remains applicable if paid within the same financial year as the date of determination. If payment is to be made outside this period, you are advised to contact Council prior to payment being made to determine if CPI increases/decreases have occurred since the date of this consent. The applicable rate of CPI at the time of consent is 118.5

NOTE 3: A copy of the Wagga Wagga Local Infrastructure Contributions Plan 2019-2034, is available for inspection at Council Chambers, corner Baylis and Morrow Streets, Wagga Wagga, or on Council's website.

C.8 Prior to the commencement of any works, a stormwater drainage design shall be submitted to, and approved by Council, to the satisfaction of the General Manager or delegate, incorporating the following:

- i) measures to limit post development flows from the site to pre-developed flows for all storms up to and including the 100 Year ARI event. Full plan details of any proposed On-Site Detention (OSD) system and supporting calculations shall be provided.
- ii) stormwater outlets designed to dissipate flow and minimise erosion.

C.9 Prior to the commencement of any works, the following plans shall be submitted to, and approved by Council, to the satisfaction of the General Manager or delegate, incorporating the following:

- i) Design of the intersection of Churches Plain Road and the solar farm access road in accordance with Austroads standards for a rural access accommodating articulated vehicles, addressing
  - the minimum SISD required for 100km/h speed zone,
  - geometry to accommodate 19m articulated vehicle movements into and out of the site. Turning paths to be provided.

C.10 Prior to the commencement of any works, amended detailed plans shall be submitted to and approved by Council, to the satisfaction of the General Manager or delegate, demonstrating the following:

- Perimeter fencing setback a minimum 10.0 metres from the centreline of overhead powerlines.
- Tree plantings not exceeding 3.0 metres in height within 10.0 metres from the centreline of overhead powerlines.

NOTE: Minimum buffer widths and heights, as set out otherwise by this consent shall be complied with. To ensure compliance with all conditions, setbacks to site boundaries may need to be increased.

- C.11 Prior to the commencement of any works, a Traffic Management Plan shall be prepared in consultation with the relevant road authorities (Council and Transport for NSW) and submitted to and approved by Council, to the satisfaction of the General Manager or delegate. The plan shall ensure that key traffic related issues associated with the development have been addressed, particularly during the construction and decommission processes. The appointed transport contractor shall be involved in the preparation of this plan. The plan shall address all light and heavy traffic generation to the development site and detail the potential impacts associated with the development, the mitigation measures to be implemented, and the procedures to monitor and ensure compliance. This plan shall address, but not necessarily be limited to the following;
- i) Require that all vehicular access to the site be via the approved access route.
  - ii) Maximum size of vehicle is a 19 metre general access vehicle.
  - iii) Details of traffic routes to be used by heavy and light vehicles, and any associated impacts and any road-specific mitigation measures.
  - iv) Details of measures to be employed to ensure safety of road users and minimise potential conflict with project generated traffic.
  - v) Proposed hours for construction activities.
  - vi) The management and coordination of the movement of vehicles for construction and worker related access to the site and to limit disruption to other motorists, emergency vehicles, school bus timetables and school zone operating times.
  - vii) Loads, weights and lengths of haulage and construction related vehicles and the number of movements of such vehicles.
  - viii) Procedures for informing the public where any road access will be restricted as a result of the project.
  - ix) Any proposed precautionary measures such as signage to warn road users such as motorists about the construction activities for the project.
  - x) A Driver Code of Conduct to address such items as; appropriate driver behaviour including adherence to all traffic regulations and speed limits, safe overtaking and maintaining appropriate distances between vehicles, etc and appropriate penalties for infringements of the Code.
  - xi) Details of procedures for receiving and addressing complaints from the community concerning traffic issues associated with truck movements to and from the site.
  - xii) Measures to ensure that the gravel pavement of Churches Plain Rd, from the site access to Baker St, is maintained to accommodate construction traffic and other users, as set out by the Traffic Impact Assessment.
  - xiii) Processes and measures to be implemented to ensure that the road



pavement and verge on the approved route through Uranquinty is maintained at the predevelopment standard throughout construction works, including measures for repairs and maintenance.

The approved plan shall be complied with at all times.

C.12 Prior to the commencement of any works, a Construction Management Plan shall be submitted to, and approved by Council, to the satisfaction of the General Manager or delegate. The plan shall address, but not be limited to:

- i) Location of parking, loading/unloading areas, storage areas, site compound.
- ii) Mud and dust management.
- iii) Details of any temporary site fencing.
- iv) Waste management and storage measures, including waste and landfill minimisation strategies.
- v) Aboriginal heritage management (including measures to give effect to the recommendation of the Aboriginal Cultural Heritage assessment approved under this consent).
- vi) Bushfire management.
- vii) Soil and Water Management including any required earthworks, stabilising batters where required and protection of waterways.
- viii) Details of what method will be used to ensure that the plan is adhered to including appropriate signage and fencing.
- ix) Security Management including details of relevant project manager and/or site foreman contact details.
- x) A Construction Noise and Vibration Management Plan, as foreshadowed in the Statement of Environmental Effects.
- xi) Incorporation of any other approved management plans, such as the traffic management plan.

The approved plan shall be complied with at all times.

C.13 Prior to the commencement of any works, a detailed analysis, prepared by an appropriately qualified person, shall be submitted to Council, to the satisfaction of the General Manager or delegate, detailing buffer screening height required across the site to ensure reflecting panels in the final solar farm design are screened from road and rail receptors, as identified in the Glint and Glare Assessments prepared by Pager Power, dated April 2021 (issue 2) and October 2021 (issue 1). The analysis shall be carried out assuming a backtracking operation with a resting angle of 0 degrees.

C.14 Prior to the commencement of any works, a detailed landscape plan shall be submitted to and approved by Council, to the satisfaction of the General Manager or

delegate. The Plan shall ensure that the buffer plantings, at maturity, achieve a solid screen when viewed externally from the site to prevent the penetration of any glint or glare from the solar panels. The plan shall detail:

- a. Species, spacings and rows, pot size and time to reach maturity.
- b. Proposed buffer width.
- c. Demonstrated compliance with condition C.13. This shall include certification from an appropriately qualified person.

The landscape plan shall be accompanied by an ongoing landscape strategy, outline measures for the successful establishment, ongoing management and ongoing maintenance of the plantings, including processes for identifying the need for, and carrying out of replacement plantings.

- C.15 Prior to the commencement of any works, a Bush Fire Emergency Plan, prepared in consultation with the local RFS and Fire & Rescue NSW (as relevant), and in accordance with Planning for Bushfire Protection 2019, shall be submitted to and approved by Council, to the satisfaction of the General Manager or delegate. The Bush Fire Emergency Plan shall include:

- detailed measures to prevent or mitigate fires igniting;
- work that should not be carried out during total fire bans;
- availability of fire-suppression equipment, access and water;
- storage and maintenance of fuels and other flammable materials;
- notification of the local NSW RFS Fire Control Centre for any works that have the potential to ignite surrounding vegetation, proposed to be carried out during a bush-fire fire danger period to ensure weather conditions are appropriate; and
- appropriate bush fire emergency management planning.

It is important to be aware of operations that may be carried out on days of Total Fire Ban and any prohibited activities or exemptions that are notified by the Commissioner of the NSW RFS under the s.99 of the Rural Fires Act 1997.

The approved plan shall be complied with at all times.

- C.16 Prior to the commencement of any works, amended plans clearly detailing a 10 metre wide Asset Protection Zone on all sides of the solar array and ancillary buildings shall be submitted to and approved by Council, to the satisfaction of the General Manager or delegate. The APZ shall meet the standards of Planning for Bushfire Protection 2019, and the RFS document 'Standards for Asset Protection Zones'. The APZ shall be in place prior to the commencement of any works and shall be maintained for the life of the development.

NOTE: The APZ must be located so as to not incorporate any land associated with the landscape buffer required under this consent.

- C.17 Prior to the commencement of any works, an Aboriginal Heritage Impact Permit, under s90 of the National Parks and Wildlife Act 1974, must be obtained from Heritage NSW for the proposed works.

- C.18 Prior to the commencement of any works, a pre-work survey/dilapidation report, documenting the road and verge conditions for the proposed construction vehicle route from the Olympic Highway to the site entrance shall be submitted to Council. The survey/report shall include detailed photographs and descriptions of the entire route and shall be to the satisfaction of the General Manager or delegate prior to the commencement of any works.

- C.19 A Section 68 Approval must be obtained from Council prior to any sewer or stormwater work being carried out on the site.

The licensed plumber must submit to Council, at least two (2) days prior to the commencement of any plumbing and drainage works on site a "Notice of Works".

NOTE: A copy of the Notice of Works form can be found on Council's website.

- C.20 Prior to works or activities commencing within the road reserve, approval under Section 138 of the Roads Act 1993 is required from Council.

A written application for Consent to Work on a Road Reserve is required to be submitted to and approved by Council. This shall include the preparation of a certified Temporary Traffic Management Plan (TTP) for the works.

It should be noted that work in the existing road reserve can only commence after the plan has been submitted and approved and then only in accordance with the submitted TTP. Please contact Council's Activities in Road Reserves Officer on 1300 292 442.

### **Requirements during construction or site works**

- C.21 All weather access, manoeuvring and parking areas shall be provided and maintained within the site.
- C.22 The following requirements of Essential Energy shall be complied with during works:
- a. Satisfactory arrangements are to be made with Essential Energy with respect to the proposed solar energy system which will form part of the development. It is the Applicant's responsibility to enter into the required Connection Agreements and any other requirements with Essential Energy for the development, which may include the payment of fees and contributions. Refer Essential Energy's Network Connections team for requirements via email [networkconnections@essentialenergy.com.au](mailto:networkconnections@essentialenergy.com.au) <<mailto:networkconnections@essentialenergy.com.au>>.
  - b. If the proposed development changes, there may be potential safety risks. Essential Energy shall be consulted for further comment.
  - c. Any existing encumbrances in favour of Essential Energy (or its predecessors) noted on the title of the above property shall be complied with.
  - d. Essential Energy's records indicate there is electricity infrastructure located within close proximity of the property. Any activities within this location must be undertaken in accordance with the latest industry guideline currently known as 'ISSC 20 Guideline for the Management of Activities within Electricity Easements and Close to Infrastructure'. Approval may be required

from Essential Energy should activities within the property encroach on the electricity infrastructure.

- e. Prior to carrying out any works, a “Dial Before You Dig” enquiry shall be undertaken in accordance with the requirements of Part 5E (Protection of Underground Electricity Power Lines) of the Electricity Supply Act 1995 (NSW).
- f. Given there is electricity infrastructure in the area, it is the responsibility of the person/s completing any works around powerlines to understand their safety responsibilities. SafeWork NSW ([www.safework.nsw.gov.au](http://www.safework.nsw.gov.au)) has publications that provide guidance when working close to electricity infrastructure. These include the ‘Code of Practice - Work near Overhead Power Lines and Code of Practice - Work near Underground Assets’.

- C.23 The construction traffic route from the Olympic Highway to the site entry must be maintained to its pre-development standard at all times during works.

During works, any works necessary, in the opinion of the General Manager or delegate, to ensure that the construction vehicle route from the Olympic Highway to the site entrance is maintained to its pre-development standard, including for the road pavement and verge, as detailed in the pre-work survey/dilapidation report approved under this consent, shall be carried out to the satisfaction of the General Manager or delegate. Where works are directed by the General Manager or delegate in writing, these works shall be carried out within any time frame specified.

- C.24 As soon as practical following the commencement of works, taking into account planting seasons and any works proposed in buffer areas, buffer plantings shall be established on the site.
- C.25 During all site works reasonable steps must be taken to suppress dust (including on Churches Plain Rd) by regular watering until such time as the soil is stabilised to prevent airborne dust transport. Dust suppression measures must include the control of dust from stockpiled sites. Where excessive dust generation is occurring due to high winds and/or dry conditions it may be necessary to temporarily cease operations.
- C.26 The developer is to maintain all adjoining public roads to the site in a clean and tidy state, free of excavated “spoil” material.
- C.27 If any Aboriginal object is discovered and/or harmed in, on or under the land, all work must cease immediately and the area secured so as to avoid further harm to the Aboriginal object. The Heritage NSW shall be notified as soon as practicable on 131 555, providing any details of the Aboriginal object and its location, and no work shall recommence at the particular location unless authorised in writing by Heritage NSW.

#### **Requirements prior to issue of an Occupation Certificate or prior to operation**

- C.28 Prior to operation of the solar farm, a minimum of 20,000 litres of water supply must be dedicated on site for the purposes of bushfire protection. The tank/s dedicated for bushfire protection must comply with the acceptable solutions under table 7.4(a) of Planning for Bush Fire Protection 2019.
- C.29 Prior to the operation of the solar farm, access roads shall comply with Table 7.4a of the Planning for Bush Fire Protection 2019.

NOTE: Alternate property access is not required.

- C.30 Prior to the operation of the solar farm, all gas services are to comply with the acceptable solutions under table 7.4(a) of Planning for Bush Fire Protection 2019.

Prior to the operation of the solar farm, all electricity services are to comply with the acceptable solutions under table 7.4(a) of Planning for Bush Fire Protection 2019.

- C.31 The solar energy system shall be decommissioned within 12 months of terminating operations. Prior to operation of the solar farm, a Decommissioning Plan shall be submitted to and approved by Council, to the satisfaction of the General Manager or delegate.

The plan shall include, but not be limited to expected timeline for the rehabilitation program, decommissioning of all solar panels, above and below the ground infrastructure, inverter stations, fencing and any other structures or infrastructure relating to the approved development. A programme of site restoration to re-establish the ground profiles to pre-development status and enable the land to be returned back into agricultural production must form part of the decommissioning plan.

All works shall follow the same management principles outlined in the Construction Management Plan.

- C.32 Following the completion of construction works, but prior to operation of the solar farm, a post-development survey/dilapidation report for the construction vehicle route, from the Olympic Highway to the site entrance shall be submitted to Council. The survey/report shall include detailed photographs and descriptions of the entire route and shall be carried out to the satisfaction of the General Manager or delegate.

Any works necessary, in the opinion of the General Manager or delegate, to ensure that the construction vehicle route, from the Olympic Highway to the site entrance is returned to its pre-development standard, including for the road pavement and verge, as detailed in the pre-work survey/dilapidation report approved under this consent, shall be carried out to the satisfaction of the General Manager or delegate. Where works are directed by the General Manager or delegate in writing, these works shall be carried out within any time frame specified.

- C.33 Prior to the operation of the solar farm, buffer plantings, as set out in the approved landscape plan, shall be established.

- C.34 Prior to the operation of the solar farm, an Operational Environmental Management Plan shall be submitted to and approved by Council, to the satisfaction of the General Manager or delegate. The Plan shall, but not be limited to:

- a. Outline all measures for the ongoing management of environmental impacts from the development.
- b. Detail ongoing management of the site, including security and weed management.
- c. Specify measures and commitments for the ongoing management of bushfire protection measures in accordance with Planning for Bushfire Protection 2019 (as amended and superseded).
- d. Measures to give ongoing effect to the Bush Fire Emergency Plan approved under this consent.



- d. Outline a process for the receipt of complaints and regular community engagement/consultation.
- e. Noise management procedure to manage operational noise complaints.
- f. Glint and glare complaints management and rectification procedure, including provisions for further modification of backtracking operations and screening where appropriate.
- g. Dust mitigation measures.
- h. Waste management.
- i. Ongoing review and update of the plan.

The plan shall be complied with at all times.

- C.35 An Occupation Certificate, must be obtained pursuant to Section 6.9 of the Environmental Planning and Assessment Act 1979, from either Council or an accredited certifying authority, prior to occupation of ancillary buildings requiring a Construction Certificate.

In order to obtain this, the "Final Occupation Certificate" form must be completed and submitted to Council with all required attachments - failure to submit the completed Occupation Certificate Application form will result in an inability for Council to book and subsequently undertake Occupation Certificate inspection.

NOTE: The issuing of an Occupation Certificate does not necessarily indicate that all conditions of development consent have been complied with. The applicant is responsible for ensuring that all conditions of development consent are complied with.

- C.36 A final inspection must be carried out upon completion of plumbing and drainage work and prior to occupation of the development, prior to the issuing of a final plumbing certificate Council must be in possession of Notice of Works, Certificate of Compliance and Works as Executed Diagrams for the works. The works as Executed Diagram must be submitted in electronic format in either AutoCAD or PDF file in accordance with Council requirements.

All plumbing and drainage work must be carried out by a licensed plumber and drainer and to the requirements of the Plumbing and Drainage Act 2011.

NOTE: Additional fees for inspections at the Plumbing Interim Occupancy / Plumbing Occupation stage may apply. This will depend on the number of inspections completed at this stage of the work/s.

- C.37 Prior to the issue of an Occupation Certificate a Water Plumbing Certificate from Riverina Water County Council shall be submitted to Council.

NOTE 1: The applicant is to obtain a Plumbing Permit from Riverina Water County Council before any water supply/plumbing works commence and a Compliance Certificate upon completion of the works. Contact Riverina Water County Council's Plumbing Inspector on 6922 0618. Please be prepared to quote your Construction Certificate number.

### General requirements

- C.38 Prior to the carrying out of decommissioning works, the decommissioning plan approved under Condition C.31 shall be reviewed to ensure it meets contemporary standards and practices for solar farm decommissioning and rehabilitation. Any amendments to the plan, that are necessary in the opinion of the General Manager or delegate, to ensure compliance with the intent of this condition, shall be made to the plan prior to the commencement of the works, and shall be complied with at all times.
- C.39 The solar energy system shall be decommissioned within 12 months of terminating operations in accordance with the details approved under Condition C.31 as amended by Condition C.38.
- C.40 The resting angle of the panels shall not be less than 5 degrees until such time that the General Manager or delegate advising in writing that the angle can be altered. Upon the receipt of such written advice, the resting angle shall comply with any minimum resting angle prescribed in that advice.

The written advice from the General Manager may include temporary or trial periods for any alterations to resting angles if in the opinion of the General Manager or delegate this is deemed necessary or appropriate to manage or assess impacts.

Resting angles can be further modified from time to time, in writing by the General Manager or delegate, at either the request of the operator, or if deemed necessary in the opinion of the General Manager or delegate to ensure unacceptable glint and glare impacts are managed.

- C.41 Prior to any alteration to resting angles at the request of the operator, a glint and glare assessment shall be carried out, demonstrating that vegetative screening established is sufficient to ensure glint and glare impacts will not impact on the Olympic Highway, Dunns Rd, the Main Southern Railway, or any user, as well as any dwelling on Lot 146 DP 754567, at any new proposed angle. The assessment shall be to the satisfaction of ARTC, Transport for NSW and Council.
- C.42 All works shall be at no cost to Council or Transport for NSW.
- C.43 Landscape buffers shall be maintained at all times (including replacement plantings where necessary) in accordance with the approved landscape strategy, and to ensure sufficient screening is maintained.
- C.44 12 months after the commencement of operations, and then every 5 years following, the Operational Environmental Management Plan shall be reviewed in consultation with Council. Any amendments to the plan, as required by the General Manager or delegate, shall be incorporated into the plan.

## **D. SCHEDULE D – Activity Approval Conditions (Section 68)**

N/A

## **E. SCHEDULE E – Prescribed Conditions**

Conditions under this schedule are prescribed conditions for the purposes of section 4.17 (11) of the Environmental Planning and assessment Act 1979.

- E.1 Fulfilment of BASIX commitments (clause 97A EP&A Reg 2000)

The commitments listed in any relevant BASIX Certificate for this development must be fulfilled in accordance with the BASIX Certificate Report, Development Consent and the approved plans and specifications.

**E.2 Compliance with Building Code of Australia and insurance requirements under the Home Building Act 1989 (clause 98 EP&A Reg 2000)**

- (1) For development that involves any building work, the work must be carried out in accordance with the requirements of the Building Code of Australia.
- (2) In the case of residential building work for which the Home Building Act 1989 requires there to be a contract of insurance in force in accordance with Part 6 of that Act, such a contract of insurance shall be in force before any building work authorised to be carried out by the consent commences.
- (3) For a temporary structure that is used as an entertainment venue, the temporary structure must comply with Part B1 and NSW Part H102 of Volume One of the Building Code of Australia.

**NOTE 1:** This condition does not apply:

- (a) to the extent to which an exemption is in force under clause 187 or 188 of the Environmental Planning and Assessment Regulation 2000 (the Regulation), subject to the terms of any condition or requirement referred to in clause 187(6) or 188(4) of the Regulation, or
- (b) to the erection of a temporary building, other than a temporary structure to which part (3) of this condition applies.

**NOTE 2:** In this condition, a reference to the Building Code of Australia is a reference to that Code as in force on the date the application is made for the relevant:

- (a) development consent, in the case of a temporary structure that is an entertainment venue, or
- (b) construction certificate, in every other case.

**NOTE 3:** There are no relevant provisions in the Building Code of Australia in respect of temporary structures that are not entertainment venues.

**E.3 Erection of signs (clause 98A EP&A Reg 2000)**

For development that involves any building work, subdivision work or demolition work, a sign must be erected in a prominent position on any site on which building work, subdivision work or demolition work is being carried out:

- (a) showing the name, address and telephone number of the principal certifying authority for the work, and
- (b) showing the name of the principal contractor (if any) for any building work and a telephone number on which that person may be contacted outside working hours, and
- (c) stating that unauthorised entry to the work site is prohibited.

Any such sign is to be maintained while the building work, subdivision work or demolition work is being carried out, but must be removed when the work has been completed.

NOTE 1: This condition does not apply in relation to building work, subdivision work or demolition work that is carried out inside an existing building that does not affect the external walls of the building.

NOTE 2: This condition does not apply in relation to Crown building work that is certified, in accordance with section 6.28 of the Environmental Planning and Assessment Act 1979, to comply with the technical provisions of the State's building laws.

NOTE 3: Principal certifying authorities and principal contractors must also ensure that signs required by this clause are erected and maintained.

#### E.4 Notification of Home Building Act 1989 requirements (clause 98B EP&A Reg 2000)

Residential building work within the meaning of the Home Building Act 1989 must not be carried out unless the principal certifying authority for the development to which the work relates (not being the council) has given the council written notice of the following information:

- (a) in the case of work for which a principal contractor is required to be appointed:
  - i) the name and licence number of the principal contractor, and
  - ii) the name of the insurer by which the work is insured under Part 6 of that Act,
- (b) in the case of work to be done by an owner-builder:
  - i) the name of the owner-builder, and
  - ii) if the owner-builder is required to hold an owner-builder permit under that Act, the number of the owner-builder permit.

If arrangements for doing the residential building work are changed while the work is in progress so that the information notified under this condition becomes out of date, further work must not be carried out unless the principal certifying authority for the development to which the work relates (not being the council) has given the council written notice of the updated information.

NOTE: This condition does not apply in relation to Crown building work that is certified, in accordance with section 6.28 of the Environmental Planning and Assessment Act 1979, to comply with the technical provisions of the State's building laws.

#### E.5 Entertainment venues (clause 98C EP&A Reg 2000)

If the development involves the use of a building as an entertainment venue, the development shall comply with the requirements set out in Schedule 3A of the Environmental Planning and Assessment regulation 2000.

#### E.6 Maximum capacity signage (clause 98D EP&A Reg 2000)

For the following uses of a building: a sign must be displayed in a prominent position in the building stating the maximum number of persons permitted in the building if the development consent for the use contains a condition specifying the maximum number of persons permitted in the building:

- (a) entertainment venue,
- (b) function centre,
- (c) pub,
- (d) registered club,
- (e) restaurant.

NOTE: Words and expressions used in this condition have the same meanings as they have in the Standard Instrument.

#### E.7 Shoring and adequacy of adjoining property (clause 98E EP&A Reg 2000)

If the development involves an excavation that extends below the level of the base of the footings of a building, structure or work (including any structure or work within a road or rail corridor) on adjoining land, the person having the benefit of the development consent must, at the person's own expense:

- (a) protect and support the building, structure or work from possible damage from the excavation, and
- (b) where necessary, underpin the building, structure or work to prevent any such damage.

NOTE: This condition does not apply if the person having the benefit of the development consent owns the adjoining land or the owner of the adjoining land has given consent in writing to that condition not applying.

## F. SCHEDULE F – General Terms of Approval (Integrated Development)

### General Terms of Approval - Heritage NSW

### Aboriginal Heritage Impact Permit, s90 National Parks and Wildlife Act 1974

#### F.1 Consultation

Apart from the copy of the Public Notice advertisement (Appendix A), there is no demonstration in the reporting provided that minimum consultation timeframes were adhered to. i.e. no copies of outgoing correspondence and notices, no dates from and to in either the consultation section, or the consultation log. Both provide dates sent, and the consultation section states '28 days response provided', but no dates to confirm this. Copies of consultation notices for each stage must be provided at the least, so that the adequacy of meeting consultation timeframes can be confirmed.

#### F.2 Salvage and relocation of Aboriginal objects

The applicant must determine the following before submitting the AHIP application:

- The proposed relocation point.



- Evidence of land holder agreement to the relocation to that point.
- Commitment from the land holder that the relocated Aboriginal objects will not be further harmed.
- Evidence of continuing consultation with the RAPs.

This information must be contained within the ACHAR in the relevant sections.

#### Additional comments

Stage 1 consultation must provide contact details for the proponent/AHIP applicant. The advertisement in The Daily Advertiser, only provides contact details for the proponent's agent (NGH Pty Ltd).

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